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Supreme Court, U.S.
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In The

Supreme Court of the United States

UNITED STATIONERS, INC.,

Petitioner,

v.

UNITED STATES OF AMERICA,

Respondent.

On Petition For A Writ Of Certiorari To The United States Court Of Appeals For The Seventh Circuit

PETITION FOR WRIT OF CERTIORARI

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QUESTION PRESENTED

Section 41 of the Internal Revenue Code of 1986 provides a tax credit for increasing "qualified research expenses." Congress enacted the credit to provide an incentive to taxpayers to develop new and improved products, lower costs, and increase efficiency, thereby improving the U.S. economy and the quality of life of its citizens. Petitioner spent a considerable amount of time and money developing eight computer software programs that enabled it to provide more efficient and better services to its customers. The question presented is whether Petitioner is entitled to the Section 41 research credit for its software development based on the plain language and purpose of the statute.

PARTIES TO THE PROCEEDING AND RULE 29.6 STATEMENT

The Petitioner in this case is United Stationers, Inc. There is no parent or publicly held company owning 10% or more of the stock of Petitioner.

The Respondent is the United States of America.

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PETITION FOR A WRIT OF CERTIORARI

United Stationers, Inc. respectfully petitions for a writ of certiorari to review the judgment of the United States Court of Appeals for the Seventh Circuit in this case.

OPINIONS BELOW

The decision of the court of appeals denying rehearing (App. 24) is reported at 1999 U.S. App. LEXIS 2893. The decision of the court of appeals on the merits (App. 1) is reported at 163 F.3d 440 (7th Cir. 1998). The decision of the district court (App. 25) is reported at 982 F. Supp. 1279 (N.D. Ill. 1997). The report and recommendation of the magistrate judge (App. 51) is unreported.

JURISDICTION

The judgment of the court of appeals was entered on December 24, 1998 (App. 23), and a petition for rehearing was denied on February 19, 1999 (App. 24). The jurisdiction of this Court to review the judgment of the court of appeals is invoked under 28 U.S.C. § 1254(1).

CONSTITUTIONAL PROVISIONS AND STATUTES INVOLVED

No constitutional provisions are involved in this case. The statute involved in this case is Section 41 of the

Internal Revenue Code of 1986.[1] The text of Section 41 is set forth in the appendix (App. 63).

STATEMENT OF THE CASE

The facts of this case have been fully stipulated and are not in dispute. This case is essentially one of statutory interpretation involving the Section 41 research credit.

Petitioner is the nation's largest independent office products wholesaler. To increase efficiency and thereby provide cheaper products and better services to its customers, Petitioner developed eight software programs to automate and computerize most of its "core" business activities of sales, marketing, purchasing, inventory control, warehousing, and delivery. The software programs enabled Petitioner and its over 10,000 resellers to be more competitive in an increasingly competitive industry.

Petitioner claimed a Section 41 research credit with respect to this software development in the amount of $156,457 for fiscal year ended August 31, 1988. The Internal Revenue Service denied Petitioner's claim.

On September 10, 1992, Petitioner filed a claim for refund in the United States District Court for the Northern District of Illinois. Judge Charles R. Norgle, Sr. referred the case to Magistrate Judge Arlander Keys for a

[1] As used herein, "Section" or "I.R.C."refers to the Internal Revenue Code of 1986, as amended, as applicable to Petitioner's federal income tax return for its fiscal year ended August 31, 1988. "Regulations" refers to the Treasury Regulations promulgated thereunder.

report and recommendation. All of the facts in the case were stipulated in an agreed statement of facts filed by the parties.

On March 18, 1997, the magistrate judge issued a Report and Recommendation agreeing with the position of the United States. App. 51. On October 16, 1997, the district court adopted most of the magistrate judge's recommendation and denied Petitioner's claim for refund. App. 25.

The district court held that Petitioner's software development activities did not constitute "qualified research" under Section 41(d)(1) because the activities were not "undertaken for the purpose of discovering information which is technological in nature" and did not constitute "a process of experimentation." App. 36; App. 39. The district court further held that Petitioner's software was developed "primarily for internal use" and thus was excluded from the definition of "qualified research" under Section 41(d)(4)(E). App. 41.

On December 19, 1997, Petitioner appealed the District Court's decision to the United States Court of Appeals for the Seventh Circuit. On December 24, 1998, the Seventh Circuit affirmed the district court's decision, App. 23, and on February 19, 1999, denied Petitioner's request for a rehearing request. App. 24.

REASONS FOR GRANTING WRIT

I. A Final and Swift Resolution of the Proper Interpretation of the Research Credit is Needed to Preserve the Credit's Effectiveness as a Stimulus to Increased Research and Development Activity in this Country.

The question presented is of vital national importance. A recent study confirmed that the research credit induces taxpayers to increase their research and development ("R&D") spending.[2] Every year thousands of taxpayers claim millions of dollars of research tax credits for their increased R&D spending. This increased R&D spending leads to increased U.S. "innovation, wage growth, consumption, investment, and exports, all of which have beneficial implications for the economy's performance and for the standard of living of American workers."[3]

Congress first enacted the research credit in 1981 as a temporary provision "to stimulate a higher rate of capital formation and to increase productivity." S. Rep. No. 97-144, at 77 (1981); H.R. Rep. No. 97-201, at 111 (1981). Since its introduction in 1981, Congress has extended the research credit eight different times and continuously reaffirmed the purpose of the research credit. Most recently, Congress extended the research credit through

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[2] *Coopers & Lybrand, L.L.P, Economic Benefits of the R&D Credit*, 78 Tax Notes 1019, 1026 (1998).

[3] *Id.* at 1020.

June 30, 1999,[4] and stated the purpose of the credit as follows:

> The Committee believes that increasing technological knowledge ultimately will lead to new and better products produced at lower costs. New and better products and lower production costs are the genesis of economic growth.

H.R. Conf. Rep. No. 105-825, at 1548-1549 (1998).

The Seventh Circuit's decision, if allowed to stand, will deny the R&D credit to many taxpayers and thereby threaten to slow R&D spending – a result diametrically at odds with the clear congressional intent to increase R&D spending in this country. As a case of first impression in the appellate courts,[5] the Seventh Circuit's decision creates a cloud of uncertainty for thousands of taxpayers across the country. Many taxpayers may postpone or cancel research projects that they would otherwise undertake if the benefits of the research credit were certain. The longer taxpayers are without final guidance, the less

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[4] Although the credit is currently set to expire on June 30, 1999, Congress is expected to extend the credit again, either temporarily or permanently. There are currently several bills before Congress which propose to extend the credit. Indeed, over the last 18 years, the credit has been allowed to expire for only a one-year period. Thus, the June 30th expiration date does not diminish the need for this Court's final and swift interpretation of the research credit.

[5] The only other decision interpreting the "qualified research" requirement under Section 41 is a recent Tax Court decision that allowed the research credit for certain software development but disallowed the research credit for other software development. *Norwest Corp. v. Commissioner*, 110 T.C. 454 (1998).

effective the research credit will be in carrying out congressional intent to stimulate R&D spending in this country. Thus, this Court's final and swift statutory interpretation of Section 41 is of paramount national importance. Every day that ends without definitive guidance is one more day where a beneficial research project may be postponed or canceled.

The national importance of the proper statutory interpretation of the research credit is evidenced by the number of *amicus curiae* briefs filed or requested to be filed in the district court and the court of appeals below.[6] Further evidence of the national importance of the research credit is the public outcry to the recently issued proposed Treasury regulations under Section 41 that essentially incorporate the same erroneous legal standards adopted by the Seventh Circuit.[7] For example, the

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[6] The American Electronics Association, Ernst & Young, L.L.P., Coopers & Lybrand L.L.P., and Norwest Corporation each filed motions for leave with the district court to file *amicus curiae* brief. The district court denied each of these motions. App. 45. At the court of appeals level, leave was granted by the Seventh Circuit to Coopers & Lybrand, L.L.P. to file an *amicus curiae* brief.

[7] We respectfully submit that the proposed regulations do not lessen the immediate need for this Court's interpretation of Section 41 for several reasons. First, thousands of taxpayers have already claimed millions of dollars of research credits in reliance on the plain language of the statute and the legislative history. The Seventh Circuit's decision would strip many of these taxpayers of their research credits. Second, with respect to future research credits, the proposed regulations are not law, *see, e.g., Estate of Howard v. Commissioner*, 91 T.C. 329, 337 (1991), and there is no guarantee when, if ever, the Treasury Department will issue final regulations under Section 41.

Software and Information Industry Association (an association representing 1,400 member software companies) and the American Electronics Association (an association representing 3,000 small, medium, and large high-technology companies) each criticized the legal standards adopted in both the proposed regulations and the Seventh Circuit's decision as flatly inconsistent with the plain language of the statute and congressional intent.[8]

Taxpayers are in need of an immediate resolution of the proper statutory interpretation of Section 41.

[8] *See Software Association Suggests Changes to Proposed Research Credit Regs.*, Tax Notes Today, March 18, 1999, *available in* Lexis, FedTax Library, TNTREG File, 1999 TNT 52-35; *High Tech Coalition Recommends Changes to Proposed Research Credit Regs.*, Tax Notes Today, March 18, 1999, *available in* Lexis, FedTax Library, TNTREG File, 1999 TNT 52-25. Many others have uniformly criticized the proposed regulations. *See, e.g., Association Makes Recommendations on Proposed Research Credit Regs.*, Tax Notes Today, March 18, 1999, *available in* Lexis, FedTax Library, TNTREG File, 1999 TNT 52-27; *IT Association With Proposed Research Credit Regs.*, Tax Notes Today, March 18, 1999, *available in* Lexis, FedTax Library, TNTREG File, 1999 TNT 52-36; *U.S. Automakers Voice Concern Over Proposed Research Credit Regs.*, Tax Notes Today, March 11, 1999, *available in* Lexis, FedTax Library, TNTREG File, 1999 TNT 47-30; *Pharmaceutical Manufacturers Suggest Changes to Proposed Research Credit Regs.*, Tax Notes Today, March 18, 1999, *available in* Lexis, FedTax Library, TNTREG File, 1999 TNT 52-37; *IRS Distrust Undermines Proposed Research Credit Regs.*, Tax Notes Today, May 6, 1999, *available in* Lexis, FedTax Library, TNTREG File, 1999 TNT 87-25; *Company Recommends Changes to Proposed Research Credit Regs.*, Tax Notes Today, March 18, 1999, *available in* Lexis, FedTax Library, TNTREG File, 1999 TNT 52-34; *TEI Offers Replacement for Proposed Research Credit Regs.*, Tax Notes Today, April 7, 1999, *available in* Lexis, FedTax Library, TNTREG File, 1999 TNT 66-24; *Arthur Andersen Recommends Changes to Proposed Research Credit*

This Court's definitive resolution of the statutory interpretation of Section 41 is needed so that the congressional purpose of the research credit can be carried out and taxpayers can properly plan their R&D activities.

II. The Seventh Circuit's Adoption of a Separate Qualitative "Discovery" Test is Contrary to the Plain Language of the Statute and Thwarts Congressional Intent

Section 41(d)(1)(B)(i) requires that research be undertaken for the purpose of "discovering" information that is "technological in nature." Although the Seventh Circuit recognized that Petitioner's software development was "technological in nature," the Seventh Circuit held that Petitioner's software development was not undertaken for purposes of "discovering" information. App. 11.

The Seventh Circuit fundamentally misinterpreted the "discovering" requirement to be a separate qualitative "discovery" test that requires research to "go beyond the current state of knowledge in the field," "pass a high threshold of innovation," and have a "broad economic effect." App. 9-11. These standards are not required by the statute and are inconsistent with congressional intent.

Section 41(d)(1)(B)(i) plainly states that what has to be "discovered" is information that is "technological in

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Regs., Tax Notes Today, April 6, 1999, *available in* Lexis, FedTax Library, TNTREG File, 1999 TNT 65-27; *Deloitte and Touche Criticizes Proposed Research Credit Regs.*, Tax Notes Today, March 18, 1999, *available in* Lexis, FedTax Library, TNTREG File, 1999 TNT 52-30.

nature." An analysis of the type of information discovered, *i.e.*, a qualitative analysis, is dealt with on an exclusive basis in the statute by the "technological in nature" requirement. This is readily apparent from the structure of the statute. Section 41(d)(1)(B) states:

> "(B) which is undertaken for the purpose of discovering information –
>
> (i) which is technological in nature, and
>
> (ii) the application of which is intended to be useful in the development of a new or improved business component of the taxpayer . . . "

By placing the "discovering" requirement in the introductory clause of Section 41(d)(1)(B), Congress presumably intended that "discovering" have the same meaning for both the technological in nature requirement in (i) and the business component requirement in (ii). The plain meaning of the word "discovering" is "to make known (something secret, hidden, unknown, or previously unnoticed)" or "to obtain for the first time sight or knowledge of." *Webster's Third New/International Dictionary, Unabridged*, p. 647 (1993). The computer software developed by Petitioner was not previously known or existent, and the creation of entirely new computer programs through the inherent trial and error process of designing, writing, integrating and testing new software code enabled Petitioner to obtain for the first time, sight or knowledge of such data.

Elementary grammar also compels the conclusion that "discovering" does not contain a separate qualitative

requirement. Discovering is a *verb*. As a *verb*, "discovering" necessarily relates to the *action* of making something known. It is the *object* of the *verb* that tells what is to be made known. In this case, the *object* is "information," and the type or quality of information is described by the *adjective* "technological in nature." Thus, by definition and elementary grammar, the type or quality of the information that must be "discovered" is based solely on the "technological in nature" requirement – a requirement that the Seventh Circuit held Petitioner had satisfied.

The legislative history further supports the conclusion that the qualitative analysis under Section 41(d)(1)(B)(i) is limited to the "technological in nature" requirement. The Conference Report to the 1986 Tax Reform Act states:

> The determination of whether the research is undertaken for the purpose of discovering information that is technological in nature depends on whether the process of experimentation utilized in the research fundamentally *relies* on principles of the physical or biological sciences, engineering, or computer science – in which case the information is deemed technological in nature. . . .

H.R. Rep. No. 99-841, II-71 (1986) (emphasis added).

Significantly, this quote is under the heading "Technological Nature"; it is not under the heading "Discovery" and no mention is made of a separate "discovery" test or of any requirement that the research "go beyond the current state of knowledge in the field" or "pass a high threshold of innovation" or have a "broad economic

effect." Surely, if Congress had intended to adopt these stringent tests, it would have said so.

The Seventh Circuit was apparently led astray by footnote 3 to the Conference Report, which reads as follows:

> Research does not rely on the principles of computer science *merely* because a computer is *employed*. Research *may* be treated as undertaken to discover information that is technological in nature, *however*, if the research is intended to expand or refine existing principles of computer science."

H.R. Rep. No. 99-841, II-71 (1986) (emphasis added).

The obvious purpose of this footnote is to clarify that the mere use of a computer in conducting research does not mean that principles of computer science have been relied upon. Ignoring this obvious purpose, the Seventh Circuit focused solely on the phrase "expand or refine existing principles of computer science" and extrapolated that computer software development could qualify for the credit *only* by *expanding* or *refining* existing *principles* of computer science. App. 9. The crucial error by the Seventh Circuit is that the purpose of the legislative history and footnote 3 is to provide guidance on the meaning of "technological in nature" and not to adopt a separate and qualitative "discovery" test. The only rational explanation of the "expand or refine" language in footnote 3 is that Congress was referring to *one of several means* by which computer software could be deemed to "rely on the principles of computer science" for purposes of satisfying the "technological in nature" requirement.

The Seventh Circuit also relied on the following quote from the 1986 Senate Report:

> The committee believes that the definition [of qualified research] has been applied too broadly in practice, and some taxpayers have claimed the credit for virtually any expenses relating to product development. According to early data on the credit, the Treasury has reported, many of these taxpayers *do not engage in high technology activities.*

S. Rep. No. 99-313, at 694-695 (1986) (emphasis added).

While it is certainly true that Congress intended to place restrictions on the research credit in 1986, the legislative history shows that the primary goal of Congress was to limit the credit to "high technology activities." Congress achieved this goal by limiting the research credit to research that was "technological in nature" – not by adopting a separate qualitative "discovery" test.[9]

Finally, in a direct response to this case, Congress recently made crystal clear that there is no separate qualitative "discovery" test when it stated:

> In extending the credit, the conferees wish to *reaffirm* the scope of "qualified research." Section 41 targets the credit to research which is undertaken for the purpose of discovering information which is technological in nature and the application of which is intended to be useful in

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[9] Congress also achieved this goal by adding specific exclusions for research after commercial production and research related to adaptation or duplication of existing products, internal-use software, surveys, studies, foreign research, and social sciences. I.R.C. § 41(d)(4).

> the development of a new or improved business component of the taxpayer. However, eligibility for the credit does not require that the research be successful – i.e., the research need not achieve its desired result. Moreover, *evolutionary* research activities intended to improve functionality, performance, reliability, or quality are eligible for the credit, as are research activities intended to achieve a *result that has already been achieved by other persons* but is not yet within the common knowledge (e.g., freely available to the general public) of the field. . . .

H.R. Conf. Rep. No. 105-825, at 1548-1549 (1998) (emphasis added).

The Seventh Circuit's blatant misinterpretation of the statute and congressional intent should not be allowed to stand.

III. The Seventh Circuit's Conclusion that "Experimentation" Requires *Result* Uncertainty Rather than *Design* Uncertainty is Erroneous and Unsupported by Either the Statute or the Legislative History

The second requirement for "qualified research" at issue in this case is whether Petitioner's software development activities constituted "elements of a process of experimentation." I.R.C. § 41(d)(1)(C). The Seventh Circuit interpreted "experimentation" to mean that there has to be "technical uncertainty about actually developing the programs." App. 14. The Seventh Circuit has again misinterpreted the statute. Initially, *it should be* reiterated that the necessary "experimentation" is required in the

context of improvements in quality, efficiency, speed and reliability.

The legislative history plainly states that "experimentation" requires uncertainty in the *means* or *methods* of achieving the *end* result; it does not require uncertainty in the *end* result itself. When it enacted the "experimentation" requirement, Congress stated:

> The term process of experimentation means a process involving the evaluation of more than one alternative designed to achieve a result where the *means* of achieving that result is uncertain at the outset. . . .
>
> Thus, for example, costs of developing a new or improved business component are not eligible for the credit if the *method* of reaching the desired objective (the new or improved product characteristics) is readily discernible and applicable as of the beginning of the research activities . . .

H.R. Conf. Rep. No. 99-841, at II-72 (1986) (emphasis added).

In direct response to this case, Congress reaffirmed that "experimentation" requires only that the *means* or *methods* be uncertain when it stated:

> Activities constitute a process of experimentation, as required for credit eligibility, if they involve evaluation of more than one alternative to achieve a result where the *means* of achieving the result are uncertain at the outset, *even if the taxpayer knows at the outset that it may be technically possible to achieve the result.*

H.R. Conf. Rep. No. 105-825, at 1548-1549 (1998) (emphasis added).

Thus, the proper legal standard to apply is whether the *means* or *methods* of achieving the *end* result are uncertain, not whether the *end* result itself is uncertain. Stated another way, experimentation requires *design* uncertainty; it does not require *result* uncertainty.

Congress recognized in 1986 that the trial and error process of computer software development *inherently* involved *design* uncertainty when it used as an example of experimentation "engineers who design a new *computer system* . . . because the *design* of those items is *uncertain at the outset.*" H.R. Conf. Rep. No. 99-841, at II-72 (1986) (emphasis added). This should end any further inquiry as to whether Petitioner's software development constitutes a "process of experimentation."

Thus, a correct application of the *design* uncertainty test – as opposed to the *result* uncertainty test applied by the Seventh Circuit[10] – leads to the inescapable conclusion that Petitioner's software development constitutes a "process of experimentation." Petitioner's software, some of which was wholly newly created, and the remainder of which bears very little resemblance to the building block software from which it evolved, is software which by its nature has gone through many revisions and corrections

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[10] Although the Seventh Circuit purportedly affirmed the District Court's holding that experimentation requires *design* uncertainty, the Seventh Circuit's analysis focuses on *result* uncertainty. App. 12; 14-15.

as it was designed and tested, making its ultimate design uncertain at the outset.

IV. The Seventh Circuit Applied the Wrong Legal Standards to Determine Whether Petitioner's Software was Developed "Primarily for Internal Use" and, if it was, Whether Petitioner's Software Development Involved "Significant Economic Risk"

Section 41(d)(4)(E) excludes from the research credit any computer software developed "primarily for internal use by the taxpayer." The issue of law at issue in this case is the definition of "primarily for internal use" in Section 41(d)(4)(E). In determining whether software is "primarily for internal use," the Seventh Circuit held that it is necessary to determine whether the software made "a significant contribution to the store of public technological knowledge." App. 16. This standard is overly broad and frustrates congressional intent.

The meaning of the phrase "primarily for internal use" should be considered in light of the original intent of the research credit. In direct response to this case, Congress admonished "that application of the definition of internal-use software should fully reflect Congressional intent." H.R. Conf. Rep. No. 105-825, at 1548-1549 (1998).

Congress originally enacted the research credit "to encourage business firms to perform the research necessary to increase the innovative qualities and *efficiencies* of the U.S. economy." H.R. Rep. No. 99-426, at 177 (1985) (emphasis added). Congress recently reaffirmed that the purpose of the research credit is to "lead to new and

better products produced at *lower costs*." H.R. Conf. Rep. No. 105-825, at 1548-1549 (1998) (emphasis added).

Given the clear congressional purpose to increase "efficiencies" and "lower costs," internal use software should not include software designed to increase efficiencies and lower costs. Specifically, software that impacts the ability of a business to produce or deliver products or services to its customers should not be treated as internal use software. The same should be true for software that allows a business to electronically interact and interface with its customers and vendors. Each of these types of software increase efficiencies and lower costs.

The stipulated facts establish that Petitioner's software programs are used in its "core" business activities of sales, marketing, purchasing, inventory control, warehousing, and delivery. Beginning in 1979, Petitioner grew at a rapid pace. Annual sales increased from $100 million to almost $1 billion by 1988, regional distribution centers increased from three to twelve, and products increased to 25,000 items. Due to this tremendous growth, Petitioner began experiencing certain operating inefficiencies which had an adverse effect on its customer service to its more than 10,000 resellers. At the same time, Petitioner's resellers were losing sales to new discount retailers (super stores), price clubs, and mail order promoters based strictly on price.

It was in this environment that Petitioner undertook to automate and computerize most of its "core" business operations in an effort to become more efficient and be better able to provide prompt service to its customers. Petitioner used the software programs to make it and its

resellers more competitive in an increasingly competitive industry. Part of Petitioner's business plan was to permit customers and suppliers to actually physically access and utilize certain of this software. By 1995, Petitioner received approximately 90% of its orders electronically from its customers.

It is exactly this type of increased efficiency that Congress intended to encourage by allowing the research credit. By contrast, what Congress had in mind when it excluded software "primarily for internal use" from the research credit was general and administrative software and similar types of software that do not materially impact the efficiency of American companies. *See* H.R. Conf. Rep. No. 99-841, at II-73 (1986) ("the costs of developing software are not eligible for the credit where the software is used internally, for example, in *general and administrative functions* (such as payroll, bookkeeping, or personnel management)") (emphasis added).

Thus, consistent with congressional intent, the definition of "primarily for internal use" in Section 41(d)(4)(E) should take into account the underlying functions of the software. Software that impacts the ability of a business to produce or deliver products or services to its customers or allows a business to interact and interface with its customers should not be treated as "primarily for internal use."[11] Under this definition, Petitioner's

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[11] We note that others agree with this definition of "internal use" software and have criticized the Seventh Circuit's overly broad definition. *See Company Recommends Changes to Proposed Research Credit Regs.*, Tax Notes Today, March 18, 1999, *available in* Lexis, FedTax Library, TNTREG File, 1999 TNT 52-34; *Arthur*

software is not "primarily for internal use" and, thus, is not subject to the exclusion in Section 41(d)(4)(E).

Even assuming *arguendo* that Petitioner's software is "primarily for internal use," the legislative history provides a special exception through which Petitioner can still be eligible for the credit if Petitioner's software development represents a "significant economic risk (as where the taxpayer commits *substantial resources* to the development and also there is *substantial uncertainty*, because of technical risk, that such *resources would be recovered* within a reasonable period)."[12] H.R. Conf. Rep. No. 99-841, at II-73 (1986) (emphasis added).

The Seventh Circuit ignores the plain language of the legislative history and concludes that the "significant economic risk" requirement means there must be a high threshold of *technical* uncertainty as to whether the software can be developed. App. 20-21. This is not what Congress said. Congress plainly states that the test is whether there is uncertainty as to whether the "resources

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Andersen Recommends Changes to Proposed Research Credit Regs., Tax Notes Today, April 6, 1999, *available in* Lexis, FedTax Library, TNTREG File, 1999 TNT 65-27; *Deloitte and Touche Criticizes Proposed Research Credit Regs.*, Tax Notes Today, March 18, 1999, *available in* Lexis, FedTax Library, TNTREG File, 1999 TNT 52-30.

[12] The other two requirements that need to be satisfied under this special exception are that the software is "innovative" and "not commercially available." H.R. Conf. Rep. No. 99-841, at II-72 (1986). The Seventh Circuit held that Petitioner's software was "innovative," and the United States conceded that Petitioner's software was "not commercially available." App. 18-19; 20.

would be recovered." H.R. Conf. Rep. No. 99-841, at II-73 (1986) (emphasis added). Thus, the test is one of "uncertainty of recovery" rather than "uncertainty of development."

Application of the correct "uncertainty of recovery" test to the stipulated facts leads to the inescapable conclusion that Petitioner had reason to believe that it might never recover the millions of dollars spent on developing the eight software programs through increased efficiencies, lower production costs, and increased sales. The project descriptions are replete with the risks present in each project.

CONCLUSION

For the foregoing reasons, Petitioner respectfully requests that the Court grant this Petition for Writ of Certiorari.

Respectfully submitted,

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APPENDIX A

In the
United States Court of Appeals
for the Seventh Circuit

No. 97-4201
UNITED STATIONERS, INC.,

Plaintiff-Appellant,

v.

UNITED STATES OF AMERICA,

Defendant-Appellee.

Appeal from the United States District Court
for the Northern District of Illinois, Eastern Division.
No. 92 C 6065 – **Charles R. Norgle, Sr.**, *Judge.*

ARGUED SEPTEMBER 9, 1998 – DECIDED DECEMBER 24, 1998

Before CUDAHY, MANION and EVANS, *Circuit Judges.*

CUDAHY, *Circuit Judge.* United Stationers, Inc. (USI) sued the United States after the IRS failed to take action on its claim for a qualified research tax credit. The district court ruled for the government, largely adopting the recommendations of a magistrate judge. USI appeals that judgment. The issue is whether USI is entitled to a qualified research credit under Internal Revenue Code § 41 with respect to its development of certain computer software programs. USI has not shown its entitlement to the qualified research credit and we therefore affirm.

I. Background

The facts of this case are not disputed. The parties submitted detailed stipulations with attached exhibits, including summaries of the software development projects at issue. These stipulations and summaries form the basis of the recitation that follows.

USI is the nation's largest wholesaler of office supplies. In response to both rapid corporate growth and industry changes in the 1980s, it attempted to correct operational inefficiencies by automating and computerizing its business. To this end, it purchased a software package, DCS, from a consulting firm for use in developing eight separate, but related, software programs. USI chose DCS for some of its file structure and data access segments; it could not have used DCS as purchased, nor could it have purchased any other software to meet its needs without modification. Instead, USI used parts of DCS as building blocks for designing application codes specific to its needs.

USI developed all eight of the software projects at issue during the fiscal year 1988. Each performs a different operational function although several work together to correct a particular inefficiency. The first program, for example, the Document Retention and Retrieval System (DRRS), maintains files, customer histories and purchase records; it is, in short, a centralized invoice data base. Customers can access certain information in DRRS and request reprints of invoices or sales histories. DRRS is integrated with the second program, the Central Invoice Project (CIP), which furnishes a paperless invoicing and

record-keeping system. The goal of CIP is to print, distribute and retain all invoices at USI's corporate headquarters in order to correct inefficiencies associated with USI's far-flung warehousing and distribution network. The third project is Concept 90, a computerized marketing program developed to address increased competition from volume discounters. USI hoped that by quickly responding to competitor pricing but carefully controlling its own price concessions it could increase sales volume on certain items. Unilink, the fourth project, is a computer-to-computer order entry system through which customers can enter orders on their own computers and transmit the orders directly to USI. On Unilink, customers can review previous orders and are immediately notified if an item is out of stock. USI developed a related project, called Distributed Order Entry, to allow interdivisional billing in the event that the division receiving the order was out of stock. USI also developed the Facility Database Project, FDP, the fifth program, to replace its outdated inventory program and as an aid in forecasting and replenishing inventories. FDP creates a hierarchy of inventory data, with information about each region's inventory first, specifics on each item in that inventory second and pricing possibilities for each item last. The sixth project was the Automated Inbound Shipment Processing Program. As its name implies, USI developed this program to replace its manual warehousing procedures with automated incoming and outgoing shipping procedures. The seventh project, the Receiving System, is integrated with this Automated Inbound Shipment Processing Program. The eighth project is called the Forecasting/Replenishment Application Project. It creates a more

timely and accurate method of inventory control. This project replaced a system based largely on an individual buyer's experience in anticipating product demand.

The project summaries also describe the risks and benefits of each program. Most of the summaries include a general statement about the uncertainty at the outset of achieving the projects' anticipated operational efficiencies or economic benefits. For example, the CIP summary states that "there was no guarantee at the outset of [CIP] that [USI], in centralizing the invoicing functions . . . would be able to both provide customers with accurate invoices on a timely basis and have easy access to that invoice data after they had been sent to customers." Similarly, Concept 90, the marketing program, involved "operational risk." And another project summary states that "[t]here was no guarantee that the FDP approach would either perform as expected or provide an adequate return on the Company's investment." Most, but not all, of the project summaries contain similar general risk warnings, presumably as estimated at the commencement of the project. Some summaries also include assessments at completion of the success of each project. For example, DRRS "generated cost savings to [USI] as well as improving its ability to service its customers." Other projects were less successful, like Concept 90 ("the economic benefit . . . was far less than originally anticipated") and the Forecasting/Replenishment Application ("this system has worked fairly well"). Again, most but not all of the summaries include such a general assessment of the project's success. None of these eight programs have been resold to third parties by USI.

In its original tax returns for the fiscal year ended August 31, 1988, USI claimed a deduction under Code § 174 of $156,457 of expenses related to the development of these eight programs. The IRS allowed this deduction. In an amended return for the same year, USI claimed a credit under § 41 of the same amount for qualified research activities based upon the IRS's allowance under § 174. The IRS took no action on this claim. USI filed this suit six months later to recover a refund based on the claimed credit.

The district court referred the case to a magistrate judge, who issued a report determining that USI's development of the programs did not constitute qualified research and that USI was therefore not entitled to the claimed refund. *See United Stationers, Inc. v. United States*, No. 92 C 6065, 1997 (N.D.Ill. March 28, 1997) (*United Stationers I*). USI filed objections to this report. The district court agreed (with a minor deviation) with the magistrate judge's report. *See United Stationers, Inc. v. United States*, 982 F.Supp. 1279 (N.D.Ill.1997) (*United Stationers II*). The district court ruled that the programs did not qualify for § 41's qualified research credit because USI neither "discover[ed] information which is technological in nature," *id.* at 1284, nor did so through a "process of experimentation." *Id.* at 1286. The district court further held that, even if the programs could meet the § 41 general requirements, they fitted within an enumerated exclusion from the allowable credit because they were for "internal use." *Id.* at 1287. Finally, the district court found that the programs did not qualify under an exception to this internal use exclusion. *Id.* at 1287-88. USI appeals these holdings.

II. Discussion

In this case, as with all claimed tax credits, the taxpayer bears the burden of showing entitlement to the credit. *See, e.g., Interstate Transit Lines v. Commissioner of Internal Revenue*, 319 U.S. 590, 593 (1943); *United States v. Wisconsin Power & Light Co.*, 38 F.3d 329, 337 (7th Cir.1994). To the extent entitlement turns on the legal question of interpretation of § 41, we review the district court's legal conclusions *de novo. See, e.g, Resolution Trust Corp. v. Gallagher*, 10 F.3d 416, 418 (7th Cir.1993). As to questions of fact, including issues of evidentiary sufficiency, we review for clear error. *See, e.g., Wisconsin Power & Light*, 38 F.3d at 337.

A. The Qualified Research Tax Credit

Section 41, the Credit for Increasing Research Activities, allows taxpayers a credit for certain expenses incurred conducting qualified research. Subsection 41(d) defines qualified research in pertinent part as follows:

> (d) Qualified research defined. – For purposes of this section –
>
> (1) In general. – The term "qualified research" means research –
>
> (A) with respect to which expenditures may be treated as expenses under section 174,
>
> (B) which is undertaken for the purpose of discovering information –
>
> (i) which is technological in nature, and –

> (ii) the application of which is intended to be useful in the development of a new or improved business component of the taxpayer, and
>
> (C) substantially all of the activities of which constitute elements of a process of experimentation for a purpose described in paragraph (3).
>
> Such term does not include any activity described in paragraph (4).

26 U.S.C. § 41(d)(1). This provision sets out a four-pronged test for qualified research. First, the research must have qualified as a business deduction under § 174. *See id.* § 41(d)(1)(A). Second, the research must be undertaken to "discover information which is technological in nature." *Id.* § 41(d)(1)(B)(i). Third, the taxpayer must intend to use the information to develop a new or improved business component. *Id.* § 41(d)(1)(B)(ii). Finally, the taxpayer must pursue a "process of experimentation" during substantially all of the research. *Id.* § 41(d)(1)(C).

Only two of these requirements are at issue here. A § 174 deduction has been allowed, satisfying the first requirement, and the government concedes the third requirement, involving usefulness for a new or improved business component. We will address the two other requirements in turn.

1. *Discover Information Which is Technological in Nature*

Section 41(d)(1)(B)(i) requires research to be undertaken "for the purpose of discovering information which is technological in nature." The district court held that, although the programs were "technological in nature," USI did not develop the programs to discover information. *United Stationers II*, 982 F.Supp. at 1284. Citing dictionary definitions and the legislative history of § 41, the district court instead found that "Stationers [had] merely applied, modified, and at most, built upon, pre-existing, technological information already supplied to it." *Id.* USI now claims that the district court's interpretation of this prong comports with neither the Code's plain language nor its legislative history. While we do not necessarily adopt the district court's view that the issue turns on the breadth of the definition of the word "discover," we believe that the terms of the requirement in question have not been met.

USI cites a dictionary which defines "discover" as "to make known (something secret, hidden, unknown, or previously unnoticed)" or "to obtain for the first time sight or knowledge of." Appellant's Br. at 15 (citing WEBSTER'S THIRD NEW INTERNATIONAL DICTIONARY, UNABRIDGED 647 (1993)). USI invites us to end our definitional inquiry here, content with an interpretation which equates discovery with mere newness. We decline this invitation. Congress attempted to give further meaning to § 41(d)(1)(B)(i) and we can look to legislative history for guidance. *See, e.g., Sundstrand Corp. v. Commissioner of Internal Revenue*, 17 F.3d 965, 967-68 (7th Cir.1994).

The Conference Report accompanying the 1986 amendments states that research that discovers information which is technological in nature must rely on "principles of the physical or biological sciences, engineering, or computer science." H.R. CONF. REP. NO. 99-841, at II-71 (1986). Specifically, "[r]esearch does not rely on the principles of computer science merely because a computer is employed. Research may be treated as undertaken to discover information that is technological in nature, however, if the research is intended to expand or refine existing principles of computer science." *Id.* n. 3. Thus Congress set a demanding standard. Not just any computer programming would qualify for a § 41 credit; qualifying research must go beyond the current state of knowledge in that field – expand or refine its principles. *See Norwest Corp. v. Commissioner*, Tax Ct. Rep. (CCH), ¶ 52,758, at 4653-54 (U.S. Tax Ct. June 29, 1998). Therefore, in the context of § 41(d)(1)(B)(i) discovery demands something more than mere superficial newness; it connotes innovation in underlying principle. *See id.*

This understanding of "discovery" also brings the requirements for the credit in line with the purposes of both the original statute in 1981 and the amendments in 1986. Congress first created a research and experimentation tax credit in 1981 as part of the Economic Recovery Tax Act of 1981 (ERTA). ERTA adopted § 174's definitions of "research" and "experimentation" but failed to specifically indicate how the credit applied to computer software development.[1] Congress hoped that ERTA would

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[1] The House Report on the ERTA research credit indicated that the credit would only apply to expenses for "developing

energize the overall economy and specifically would stimulate business investment in technological research. *See* S. REP. NO. 97-144, at 76-77 (1981); H. REP. NO. 97-201, at 111 (1981). In 1986, in response to taxpayer abuse, Congress amended the research tax credit provision to include an express statutory definition of qualified research. The 1986 amendments restricted the definition of qualified research to that which "discover[s] information which is technological in nature" in an attempt to limit the deduction to only high technology research.[2] Congress clearly intended, then, that qualifying research pass a high threshold of innovation and be of broad

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new or significantly improved programs or routines that cause computers to perform desired tasks (as distinguished from other software costs where the operational feasibility of the program or routine is not seriously in doubt)." H. REP. NO. 97-201, at 114 (1981). The Conference Report did not, however, include these software guidelines. *See* H. CONF. REP. NO. 97-215, at 223 (1981).

[2] The Senate Finance Committee report on these amendments well illustrates Congress's concerns:

> After reviewing available information and testimony on the actual use of the credit to date, the committee believes that the statutory credit provision should set forth an express definition of qualified research expenses for purposes of the credit. The committee believes that the definition has been *applied too broadly in practice*, and some taxpayers have claimed credit for virtually any expenses relating to product development. According to early data on the credit, the Treasury has reported, many of these taxpayers do not engage in high technology.

S. REP. NO. 99-313, at 694-95 (1986) (emphasis added); *accord* H. REP. NO. 99-426, at 178 (1985).

effect. *See Norwest*, ¶ 52,758, at 4653-54; *see also TSR, Inc. v. Commissioner*, 96 T.C. 903, 916-20 (1991).[3]

We believe that our interpretation – as well as that of the district court – comfortably fits the Code's language and its legislative history and compels the conclusion that USI's programs did not discover information which is technological in nature. USI's projects did not refine or expand the principles of computer science. Instead, they modified an existing software program in an attempt specifically to improve USI's inventory control system. Further, although these applications were new to USI and helped it eliminate various operational inefficiencies, they were not of broad economic effect. USI accuses the district court of imposing a "revolutionary" standard where Congress intended no more than "evolutionary" research to qualify. USI's amicus similarly cautions against raising the bar of the research tax credit too high. We are respectful of these warnings but are no less convinced of our conclusion. Wherever the line is drawn, these projects fall short. The more or less routine modification of a commercially-available software package to apply to USI's inventory control computers simply does not measure up to the demanding requirements of

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[3] USI also asserts that the term "discovery" in § 41(d)(1)(B)(i) must have the same meaning as in § 174 and § 41(d)(1)(B)(ii). Legislative history suggests, however, that "Congress intended to treat the discovery test under section 41 more narrowly than the discovery test created under section 174." *Norwest*, ¶ 52,758, at 4653; *see also id.* (arguing that the timing of the enactment of the sections as well as their express language are reliable indicia that discovery means different things in §§ 41 and 174).

§ 41(d)(1)(B)(i). *See* H. REP. NO. 99-426, at 180 (1985); *compare Norwest*, ¶ 52,758, at 4663-65 (examples of computer programs that meet the high standard) *with id.* at 4667, 4668 (examples of computer programs that do not meet the high standard).

2. *Process of Experimentation*

Section 41(d)(1)(C) provides that qualified research involve "substantially all of the activities which constitute elements of a process of experimentation." 26 U.S.C. § 41(d)(1)(C). The district court, again looking to dictionary definitions and legislative history for guidance, held that this test requires qualifying research to have significant design uncertainty from its outset. *See United Stationers II*, 982 F.Supp. at 1285. The court then found USI's claim of uncertainty "not persuasive:" "while the aspired benefits of the projects were in doubt, the development of the means that would allow [USI] to potentially achieve those benefits was not." *Id.* (citation omitted). USI now challenges both the district court's legal interpretation of this process of experimentation test and its factual findings regarding design uncertainty in the eight projects. We reject both challenges.

USI again begins with its plain reading of the subsection. According to USI's dictionary, an experiment is " . . . a test, trial, or tentative procedure, an act or operation for the purpose of discovering something unknown or of testing a principle, supposition, etc." Appellant's Br. at 23 (citing RANDOM HOUSE COLLEGE DICTIONARY 465 (rev. ed. 1984)). The projects fit squarely within this definition, USI claims, because software

development involves debugging, a process of testing and correcting computer programs. We find this argument unpersuasive. Debugging programs amounts simply to fine-tuning computer operating instructions. Although we are reluctant to establish bright-line rules – § 41 cases will always be highly fact-intensive – we think that a process of experimentation involves something more than simply debugging a computer program. *See Norwest*, ¶ 52,758, at 4669 (computer programming project did not qualify because it "merely required conducting good coding and eliminating bugs through testing").

The legislative history of § 41(d)(1)(C) bolsters this conclusion. The Conference Report explains the meaning of the process of experimentation test:

> The term process of experimentation means a process involving the evaluation of more than one alternative designed to achieve a result where the means of achieving that result is uncertain at the outset. This may involve developing one or more hypotheses, testing and analyzing those hypotheses (through, for example, modeling or simulation), and refining and discarding the hypotheses as part of a sequential design process to develop the overall component.
>
> Thus, for example, costs of developing a new or improved business component are not eligible for the credit if the method of reaching the desired objective (the new or improved product characteristics) is readily discernible and applicable as of the beginning of the research activities, so that true experimentation in the scientific or laboratory sense would not have to be undertaken to develop, test, and

> choose among viable alternatives. . . . [E]ngineers who design a new computer system, or who design improved or new integrated circuits for use in computer or other electronic products, are engaged in qualified research because the design of those items is uncertain at the outset and can only be determined through a process of experimentation relating to specific design hypotheses and decisions as described above.

H.R. CONF. REP. No. 99-841, at II-72 (1986). USI would have us hold that this Report dictates a *per se* credit for software development. This suggestion, however, ignores the Report's mention of only *systems* design (not *software* design) as well as its focus on overcoming design uncertainty through a systematic – almost scientific – methodology. The Report suggests that qualifying research must from its outset involve some technical uncertainty about the possibility of developing the product. *See Norwest*, ¶ 52,758, at 4655 (discussing the "required uncertainty"); *cf. TSR*, 96 T.C. at 920-21.

USI and amicus again caution that this articulation of the relevant standard is too narrow. We are not persuaded, however, and conclude that USI's projects did not involve a process of experimentation as envisaged by Congress. The eight projects involved the modification of a commercially-available software package to fit USI's particular operational needs. Most of the project summaries include general statements about the uncertainty of actually realizing the anticipated operational efficiencies and resultant economic benefits. None of the summaries, however, describes any technical uncertainty about actually developing the programs. *Compare Norwest*, ¶ 52,758,

at 4670 (programming project did not constitute qualified research because, in part, it did not involve technical risk). Nor were there any doubts about the ability of computers to perform the invoicing, billing and marketing tasks. That is, there was simply no technical uncertainty from the outset. We therefore conclude that USI's development of the eight programs did not involve a process of experimentation and that the district court did not clearly err in concluding that the projects did not involve the level of uncertainty necessary to clear this hurdle.

B. The Internal Use Exclusion

Section 41(d)(1) excludes from the qualified research credit any computer software developed "primarily for internal use by the taxpayer." 26 U.S.C. § 41(d)(4)(E). For lack of other authority, the district court consulted the legislative history and proposed Treasury regulations to determine what "internal use" means. *See United Stationers II*, 982 F.Supp. at 1286. The district judge employed a "totality of the circumstances" test and concluded that USI's programs "were the type of internal use software that Congress specifically sought to exclude from the § 41 research credit." *Id.* at 1287. USI, of course, contests this conclusion and constructs two elaborate arguments in an attempt to rescue the projects from this internal use exclusion. Neither argument, despite its admirable ingenuity, is particularly compelling.

Again, nothing in the Code or in case law[4] explicitly defines internal use. We therefore plunge again into the muddy waters of legislative history. USI points us to 1981 Congressional records to support its reading of the exclusion. Only software intended exclusively for internal use, USI argues, should be excluded because the original intent of the research credit was to stimulate the economy; therefore, any program that provides a stimulus to or has an impact on the economy, however indirect or insubstantial, should escape the internal use exclusion. This proposed analysis sweeps too broadly. Congress intended the original credit to reward taxpayers for a significant contribution to the store of public technological knowledge. *See* S. REP. NO. 97-144 (1981); H. REP. NO. 97-201 (1981). To avoid this exclusion, then, a taxpayer claiming a credit for developing software must to an appropriate extent make the program available to the public. Something more than a speculative or attenuated impact on the economy is required.

USI also pins its hope on the 1986 Conference Report which explicitly states that software development projects would constitute internal use software where they are "used internally, for example, in general and administrative functions (such as payroll, bookkeeping, or personnel management) or in providing noncomputer services (such as accounting, consulting, or banking services)." H.R. CONF. REP. NO. 99-841, at II-73 (1986). USI relies on this language to urge us to draw elusive distinctions between the provision of general and administrative

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[4] In *Norwest* the parties agreed that all the programs constituted internal use software. *See Norwest*, ¶ 52,758, at 4650.

services and a taxpayer's core revenue-generating activities. Core business activities have an external impact and should not be subject to the internal use exclusion, USI asserts. It maintains that the projects at issue here – inventory controls and the like – are integral to its core revenue activities as a wholesale distributor. USI therefore concludes that its eight projects cannot be internal use software.

We cannot accept this analysis. USI seems to be asking us to view cost accounting methodology (specifically, the difference between general overheads and directly assigned costs) as a determinative principle in identifying internal use. In effect, USI appears to be arguing that, if the programs involve activities that directly impact parties outside the taxpayer, they are not for internal use. As we stated before, however, this formulation does not fully capture the idea of contributing to the store of public technological knowledge. In any event, we agree with the district court that all the relevant facts – the totality of the circumstances – must be taken into account. *See United Stationers II*, 982 F. Supp. at 1286-87; *see also* Prop. Treas. Reg. § 1.41-4(e)(4), 62 Fed. Reg. 81, 83 (Jan. 2, 1997) (Credit for Increasing Research Activities). And, on the record before us, the district court's conclusion that the software development projects were for internal use is not clearly erroneous. USI developed all of the software to help it track its huge inventory. Even the two programs to which customers have limited access, DRRS and Unilink, were developed primarily for use by USI in streamlining its operations. The services these software programs expedite – marketing, ordering, invoicing, shipping, receiving, pricing, etc. – even though they may have

a direct impact on customers, suppliers and other third parties do not rescue the programs from the internal use exclusion.

C. Innovative and Risky Exception to the Exclusion

The legislative history of § 41 introduces an exception to the internal use exclusion which would permit a qualified research credit for the development of internal use computer software that meets the general requirements for the credit that we have already discussed, is innovative, involves risk and results in software that is not commercially available. *See* H.R. CONF. REP. NO. 99-841, at II-73 (1986); *see also* Prop. Treas. Reg. § 1.41-4(e)(5)(i)-(iii), 62 Fed. Reg. 81, 83 (Jan. 2, 1997) (Credit for Increasing Research Activities) (adopting this same standard).[5] The parties stipulated that all eight of

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[5] The concurrence correctly points out that this proposed regulation has not been formally adopted. However, the government's position on this point is as follows:

> Final regulations have not yet been issued under Section 41(d)(4)(E). Nonetheless, it is apparent that, in view of [the] legislative history, the development of internal-use software only can be treated as qualified research if, in addition to the requirements set forth in Section 41(d)(1), it also satisfies the following three requirements: (1) the software must be highly innovative; (2) the development of the software must involve significant economic risk; and (3) the software must not be commercially available.

Appellee's Br. at 42-43 (footnote omitted).

the programs were not commercially available. The district court held that the programs "all fall under the plain meaning of the definition [of innovative] included in the legislative history" and therefore meet the requirements of the first prong of the special exception. *United Stationers II*, 982 F. Supp. at 1287-88.[6] However, the district judge found against USI on the second prong, concluding that the projects did not involve substantial uncertainty because of technical risk. *See id.* at 1288. USI now challenges the court's legal and factual disposition of the risk prong, while the government challenges the district court's factual findings as to innovativeness. We consider each of these contentions, taking the government's argument first.

According to the Conference Report, computer software is innovative if it "results in a reduction in cost, or improvement in speed, that is substantial and economically significant." H.R. CONF. REP. NO. 99-841, at II-73 (1986). Applying this principle, the government argues that the district court did not properly focus on the economic significance of the efficiencies generated by USI's programs. It points out that some 65% of the original investment in the projects did not produce the anticipated economic returns. But we do not think that this quantitative approach is necessarily dispositive; the facts of every case will be different. *Cf. Norwest*, ¶ 52,758, at 4656 (rejecting an attempt to quantify the required improvement). Instead, we believe that Congress's use of

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[6] This is the one point on which the district judge disagreed with the magistrate. *Compare United Stationers I*, 1997 WL 159526, at *5.

the adjectives "substantial" and "significant" indicates that internal use software to escape the exclusion must be more clearly innovative than software merely meeting the § 41 requirements in general. *See id.; see also* S. REP. NO. 99-313, at 695 (1986) (internal use software must meet a "high threshold of innovation"); H. REP. NO. 99-426, at 178 (1986) (same). After a thorough review of the project summaries, we believe that all of the programs resulted in improvements in speed or reductions in cost. The district court concluded that these efficiencies met the more onerous requirements of the relevant test. We cannot say on this record that the district court clearly erred in finding that the programs were innovative.

But the Conference Report also defines the risk necessary to meet the requirements of this exception to the internal use exclusion. The Report states that a computer software research project must involve "significant economic risk (as where the taxpayer commits substantial resources to the development and also there is substantial uncertainty, because of technical risk, that such resources would be recovered within a reasonable period)." H.R. CONF. REP. NO. 99-841, at II-73 (1986). USI argues that the district court improperly focused on the uncertainty of developing the programs rather than the uncertainty that the programs would recover their costs. Whatever the focus, however, USI's projects do not meet the exception's definition because they did not involve the requisite technical risk. In the context of the general requirements for § 41, we have already found that there was little if any technical risk that USI would not succeed in developing the programs. Here, in the context of an exception to an express exclusion, Congress again employed the weighty

adjective "substantial" to indicate a higher threshold of risk than for software merely meeting the § 41 requirements in general. We do not purport to define the exact contours of this test – again, the inquiry will be fact-driven, and proposed regulations might further guide this determination – but we can be confident that because USI's projects did not meet the less demanding general requirements of § 41's qualified research definition, they necessarily do not pass the higher threshold of risk required by the exception to the internal use exclusion. We therefore also agree with the district court on this requirement.

The judgment therefore is AFFIRMED.

MANION, Circuit Judge, concurring in part and concurring in result.

Although I concur with the court's opinion and holding, I take issue with the analysis in part IIC which addresses the proposed exception to the statutory exclusion. Section 41(d)(4)(E) disallows the qualified research credit for computer software that is developed by or for the taxpayer "primarily for internal use by the taxpayer." 26 U.S.C. § 41(d)(4)(E). The plain meaning of the statute eliminates the eight projects for which United Stationers seeks the credit because the projects were clearly for internal use. The court expands on this exception by applying a regulation found only in the legislative history to 26 U.S.C. § 41 and proposed regulations; it is not in the statute and it has not been formally adopted by the Treasury Department. In the absence of a law passed by both houses of Congress and signed by the President, or a regulation adopted pursuant thereto, we have no basis on

which to conclude that a taxpayer meeting this exception is entitled to a tax credit. While the court's analysis of this exception correctly concludes that the credit does not apply, it could send the wrong signal both to taxpayers and to the Treasury Department to invoke a regulation not legally in place. Until the regulation is made law, this court's analysis should be confined to the statute.

A true Copy:

Teste:

Clerk of the United States
Court of Appeals for the Seventh
Circuit

APPENDIX B

United States Court of Appeals

For the Seventh Circuit

Chicago, Illinois 60604

JUDGMENT – WITH ORAL ARGUMENT

Date: December 24, 1998

BEFORE: Honorable RICHARD D. CUDAHY, Circuit Judge

Honorable DANIEL A. MANION, Circuit Judge

Honorable TERENCE T. EVANS, Circuit Judge

No. 97-4201

UNITED STATIONERS, INCORPORATED,

Plaintiff-Appellant

v.

UNITED STATES OF AMERICA,

Defendant-Appellee

Appeal from the United States District Court for the Northern District of Illinois, Eastern Division
No. 92 C 6065, Charles R. Norgle, Judge

The judgment of the District Court is AFFIRMED, with costs, in accordance with the decision of this court entered on this date.

(1061-110393)

APPENDIX C

United States Court of Appeals

For the Seventh Circuit

Chicago, Illinois 60604

February 19, 1999

Before

Hon. RICHARD D. CUDAHY, Circuit Judge

Hon. DANIEL A. MANION, Circuit Judge

Hon. TERENCE T. EVANS, Circuit Judge

UNITED STATIONERS, INC., Plaintiff-Appellant, No. 97-4201 vs. UNITED STATES OF AMERICA, Defendant-Appellee.	Appeal from the United States District Court for the Northern District of Illinois, Eastern Division. No. 92 C 6065 Charles R. Norgle, Sr., Judge.

ORDER

On consideration of the petition for rehearing filed by the plaintiff-appellant, United Stationers, Inc., in the above-entitled case, all of the judges on the original panel have voted to deny a rehearing. Accordingly,

IT IS ORDERED that the aforesaid petition for rehearing be, and the same is, hereby DENIED.

APPENDIX D

United States District Court

Northern District of Illinois
Eastern Division

UNITED STATIONERS, INC.

v.

UNITED STATES OF AMERICA

JUDGMENT IN A CIVIL CASE

Case Number: 92 C 6065

☐ Jury Verdict. This action came before the Court for a trial by jury. The issues have been tried and the jury rendered its verdict.

■ Decision by Court. This action came to trial or hearing before the Court. The issues have been tried or heard and a decision has been rendered.

IT IS ORDERED AND ADJUDGED finds that Stationer has failed to show that its projects met the requirements for a tax credit under 26 U.S.C. § 41. Stationer's claim for a tax credit for increasing research activities is denied.

Michael W. Dobbins,
Clerk of Court

Date: 10/20/97

/s/ Eric Fulbright
Eric Fulbright, Deputy Clerk

IN THE UNITED STATES DISTRICT COURT
FOR THE NORTHERN DISTRICT OF ILLINOIS
EASTERN DIVISION

UNITED STATIONERS, INC.,	)	
	)	No. 92 C 6065
Plaintiff,	)	
	)	HONORABLE
v.	)	CHARLES R.
	)	
UNITED STATES OF AMERICA,	)	NORGLE
	)	
Defendant.	)	

OPINION AND ORDER

CHARLES R. NORGLE, SR., District Judge:

Before the district court is the issue of an IRS denial of a tax credit to a corporate taxpayer, Plaintiff United Stationers, Inc. ("Stationers"). The district court must also rule on the objections of Stationers to the Report and Recommendation of the Magistrate Judge. Pursuant to Local General Rule 2.41(B), the district court referred to the Magistrate Judge the sole question of whether Stationers was entitled to a tax credit under Internal Revenue Code 26 U.S.C. § 41 (1986) ("§ 41") for increasing research activities. The Magistrate Judge conducted a hearing and filed a Report and Recommendation ("Report"), recommending the denial of Stationers' claim for a tax credit under § 41.[1] For the following reasons, the

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[1] It should be noted that though the parties did not consent to a bench trial before the Magistrate Judge, they did agree to a judgment on the pleadings by the district court based upon the absence of any factual disputes in the case. The parties are reminded that the Report is not considered a final judgment. However, its value in serving as a recommendation should not

district court overrules all of Stationers' objections except for objection number four (addressing the Magistrate Judge's discussion of the term "innovative"). The district court's opinion not only deals with the objections, but also includes a comprehensive ruling on the merits.

I. BACKGROUND

The only issue before the district court is whether Stationers' implementation of eight computer software projects qualifies for a tax credit under § 41. The district court has reviewed all submissions of counsel. With no facts in dispute, the parties filed an agreed statement of facts, some of which are incorporated into this opinion.

Stationers, through its subsidiaries, is the nation's largest independent office supplies wholesaler. Beginning in 1979, Stationers grew at a rapid pace, with annual sales increasing from $100 million to almost $1 billion by 1988. Along with this growth, Stationers began experiencing certain operating inefficiencies which had an adverse effect on customer services.

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be underestimated. *See National Metal Finishings, Inc. v. LaSalle National Bank*, No. 94 C 1211, 1995 WL 609312, at *5 (N.D. Ill. Oct. 2, 1995) ("Although Magistrate Judges do not have the constitutional authority to decide cases without the consent of the parties," their Reports and Recommendations assist in the administration of justice, "are helpful in the adjudication of cases and are taken very seriously by [district courts].") Pursuant to Rule 72(b) of the Federal Rules of Civil Procedure and 28 U.S.C. § 636(b)(1)(C), the district court has completely reviewed the Report and arguments of counsel on a de novo basis.

To become more efficient and to provide better services to its customers, Stationers began to automate and computerize most of its business operations during its fiscal year ending August 31, 1988. Pursuant to this plan, Stationers purchased a software package ("DCS") for $956,000 from a business consulting firm. Stationers purchased DCS for some of its file structure and data access segments, to use as building blocks in the development of its automation project. Stationers used only the file structure and access code elements of part of the full DCS product. Also, Stationers designed all application codes to meet Stationers' particular needs. Finally, Stationers could not have used DCS as delivered, and it was not Stationers' intention to use it in any way other than as a building block.

During its fiscal year ending August 31, 1988, Stationers developed the following software: 1) the Document Retention and Retrieval System ("DRRS") for maintenance of files, customer histories, and purchase records; 2) the Central Invoice Project ("CIP") for paperless invoicing and recordkeeping; 3) Concept 90, a computer-run marketing program; 4) Unilink, a computer-to-computer order entry system; 5) the Facility Database Project ("FDP") for inventory records, forecasting and replenishment; 6) the Automated Inbound Shipment Processing Program ("SCS") to automate shipping procedures; 7) the Forecasting/Replenishment Application software to create a more timely inventory control and planning system; and 8) the Receiving System software to improve performance and reliability in warehouse productivity, reduce time for merchandise on the receiving

dock, increase inventory turnover, and improve inventory accuracy. (These will be collectively referred to as the "projects.")

Stationers used the projects generally in its business and did not attempt to sell them. In addition, part of Stationers' business was to permit customers and suppliers to access and utilize the projects to a certain extent.

In its original tax return for the taxable year ending August 31, 1988, Stationers deducted the costs of developing the projects under 26 U.S.C. § 174 ("§ 174"), which allows a current deduction for research and experimental expenditures. Based on an examination of Stationers' tax return, the IRS agreed to the amounts that Stationers took as deductions under § 174. Good news, for awhile.

In an amended tax return for the taxable year ending August 31, 1988, Stationers claimed a refund for $156,457 based upon § 41's credit for increasing research activities. Stationers computed its § 41 credit wholly upon those amounts that the IRS had previously agreed were properly deducted under § 174. This suit is for the refund of income taxes and interest which Stationers contends were erroneously and illegally assessed against and collected from it prior to Stationers' claim of a § 41 credit for the taxable year ending August 31, 1988. Stationers asserts that it is entitled to the tax credit because it expended considerable amounts of time and money developing the projects for purposes of increasing productivity and to make Stationers more competitive within the office supply industry.

II. DISCUSSION

A. Standard of Review

Tax credits, like deductions, are matters of legislative grace, and the taxpayer must clearly demonstrate entitlement to the credit. *Hauptli v. Commissioner*, 951 F.2d 1193, 1195 (10th Cir. 1991); *Schiff v. United States*, 942 F.2d 348, 352 (6th Cir. 1991); *see also New Colonial Ice Co. v. Helvering*, 292 U.S. 434, 440 (1932) (deductions are a matter of legislative grace).

"In a tax refund suit the taxpayer bears the burden of proving the amount he is entitled to recover." *United States v. Janis*, 428 U.S. 433, 440 (1976) (*citing Lewis v. Reynolds*, 284 U.S. 281 (1932)). "[T]he Commissioner's tax deficiency assessments are entitled to the 'presumption of correctness.' This presumption imposes upon the taxpayer the burden of proving that the assessment is erroneous." *Pittman v. C.I.R.*, 100 F.3d 1308, 1313 (7th Cir. 1996) (*quoting Gold Emporium, Inc. v. Commissioner*, 910 F.2d 1374, 1378 (7th Cir. 1990)). "The presumption is not irrebuttable however." *Pittman*, 100 F.3d at 1313. "[T]o rebut the presumption of correctness and shift the burden to the Commissioner, the taxpayer must demonstrate that the Commissioner's deficiency assessment lacks a rational foundation or is arbitrary and excessive." *Id.*

B. Section 41

Section 41, entitled "Credit for increasing research activities," provides a tax credit for "qualified research" activities. 26 U.S.C. § 41(d)(1) (1986). Even if a taxpayer's research project meets the general requirements for a tax

credit under § 41(d)(1), certain exclusions may apply, limiting the availability of the credit. *See* 26 U.S.C. § 41(d)(4). Most relevant here is the exclusion which states that qualified research shall not include, "[e]xcept to the extent provided in regulations, any research with respect to computer software which is developed by (or for the benefit of) the taxpayer primarily for internal use by the taxpayer. . . . " 26 U.S.C. § 41(d)(4)(E).

Though § 41 was enacted over 11 years ago, the Treasury Department has yet to adopt Final Regulations for § 41. Nonetheless, the first step toward adopting a final version of Regulations for § 41 recently went underway when the Treasury promulgated Proposed Regulations in January 1997. *See* Prop. Treas. Reg. § 1.41-4(e), 62 Fed. Reg. 82 (1997). We look forward to the adoption of the Final Regulations to aid taxpayers and the courts. At this point, however, the court is aware that Proposed Regulations carry no more weight than a position espoused in a brief *See F. W. Woolworth Co. v. Commissioner*, 54 T.C. 1233, 1265-66 (1970).

In any event, even if Stationers initially qualifies for the tax credit under § 41(d)(1), it must still overcome the exclusionary hurdle under § 41(d)(4)(E). Because the Magistrate Judge denied Stationers' claim under both § 41(d)(1) and § 41(d)(4)(E), the court will examine, in turn, whether Stationers' projects survive under each section.

The parties' disagreement as to whether Stationers' several projects were qualified research activities under § 41(d) is at the heart of this dispute. The statute defines qualified research as research:

> (A) with respect to which expenditures may be treated as expenses under section 174,
>
> (B) which is undertaken for the purpose of discovering information –
>
> (i) which is technological in nature, and
>
> (ii) the application of which is intended to be useful in the development of a new or improved business component of the taxpayer, and
>
> (C) substantially of all of the activities of which constitute elements of a process of experimentation for a purpose described in paragraph (3).
>
> Such term does not include any activity described in paragraph (4).

26 U.S.C. § 41(d)(1). Though the statute purports to define the term qualified research, the exact meaning of its subsections remains unclear because there is little, if any, case law addressing § 41.[2] Therefore, the court will examine the face of § 41 and its legislative history. In

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[2] Though primary authority is scarce, we are enlightened by several articles addressing the § 41 tax credit. *See, e.g.*, Robert L. Black, *R&R Credit Revived by 86 Act but in a Restricted Fashion*, 66 The Journal of Taxation 12 (January 1987); James A. Guadiana, *New Regulations Increase Availability of Tax Benefits for Research and Experimental Costs*, 43 Taxation for Accountants 178 (September 1989); David S. Hudson, *The Tax Concept of Research or Experimentation*, 45 Tax Lawyer 85 (Fall 1991); Drew. A. Knowles & Frederick R. Parker, Jr. *Is the Deductibility of Costs of Developing Internal-Use Software Still an Issue?*, 83 The Journal of Taxation 82 (August 1995) (primarily focusing on § 174); James C. Zinman, *Corporations Can Use a Partnership to Increase Benefits from R&D Expenses*, 16 Taxation for Lawyers 220 (January/February 1988).

doing so, the court is aware that "[w]ords in a statute are to be given their plain and ordinary meaning." *Yellow Freight System, Inc. v. United States*, 24 Cl. Ct. 804, 807 (1991) (citation omitted). Accordingly, courts look to the contemporary definition provided in a reliable dictionary. *Id.* "If there is neither a plain meaning to the statute nor any express definitions [provided], then the court must look for a clear legislative intent." *Fairchild Industries, Inc. v. United States*, 30 Fed. Cl. 839, 842-43 (1994) (citation omitted), *rev'd on other grounds*, 71 F.3d 868, 874 (Fed. Cir. 1995). "Ideally, the legislative intent can be evinced from the plain meaning of the statutory language itself, but if it cannot the court must turn to extrinsic aids such as legislative history, rules of statutory construction, and the construction placed on the statute by the agency that administers it." *Id.* (*citing J.M. Huber Corp. v. United States*, 27 Fed. Cl. 659, 663 (1993)).

The parties do not contest that Stationers' projects qualify for a deduction under § 174 (§ 41(d)(1)(A)), and that the projects were "intended to be useful in the development of a new or improved business component of the taxpayer," § 41(d)(1)(B)(ii). However, the parties vigorously contest whether Stationers' projects were "undertaken for the purpose of discovering information which is technological in nature" under § 41(d)(1)(B)(i), and whether "substantially all of the activities of [the research] constitute elements of a process of experimentation" under § 41(d)(1)(C).

1. Technological in nature

The term "technological" is defined as "resulting from improvement in technical processes that increases the productivity of machines and eliminates manual operations or the operations done by older machines." *Webster's Third New International Dictionary, Unabridged* 2348 (1993). Under this definition, Stationers' projects can be considered technological in nature. That it is not the end of our inquiry, however, for the statute says that research must be undertaken "to discover" information that is technological in nature. 26 U.S.C. § 41(d)(1)(B)(i).

The plain meaning of the term "discover" is "to make known (something secret, hidden, unknown, or previously unnoticed)" or "to obtain for the first time sight or knowledge of." *Webster's Third New International Dictionary, Unabridged* 647 (1993). Although we are reluctant to enter the bramble bush of legislative intent, we note that the legislative history of § 41 attempted to explain what "discovering information that is technological in nature" means. *See* H.R. Conf Rep. No. 99-841, at II-71 (1986) ("Conference Report"). The Conference Report stated that "[t]he determination of whether the research is undertaken for the purpose of discovering information that is technological in nature depends on whether the process of experimentation utilized in the research fundamentally relies on principles of the physical and biological sciences, engineering, or computer science. . . . " *Id.* The inclusion of the term "process of experimentation" in the above statement serves only to further muddy the waters by presupposing that the research project in question qualifies as an experimental process. Nonetheless, that statement does imply that a research project qualifying

for a § 41 credit must entail some sort of discovery. Indeed, the Conference Report clarified its inclusion of computer science by adding the following explanation in a footnote: "Research does not rely on the principles of computer science merely because a computer is employed. Research may be treated as undertaken to discover information that is technological in nature, however, if the research is intended to expand or refine existing principles of computer science." *Id.* at n. 3.

In this case, Stationers initially purchased a software package from a consulting firm to serve as a building block in the development of its projects. Though Stationers designed the application codes from the software package to meet its particularized needs, there is no evidence that it "discovered" any information which was technological in nature; nor can it be said that Stationers intended "to expand or refine existing principles of computer science." Rather, Stationers merely applied, modified, and at most, built upon, pre-existing, technological information already supplied to it. This is a far-cry from what Congress contemplated when it spoke of research directed at the "principles of computer science." *See TSR, Inc. v. Commissioner of Internal Revenue*, 96 T.C. 903, 920 (1991) (taxpayer's gathering of pre-existing information and incorporating it into a computer game was not directed at, and did not result in, any technological breakthrough). This view is also consistent with the legislative comment discussing the addition of the "technological in nature" requirement to § 41:

> The committee believes that the definition [of qualified research] has been applied too broadly in practice, and some taxpayers have claimed

> the credit for virtually any expenses relating to product development. According to early data on the credit . . . many of these taxpayers do not engage in high technology activities.

S. Rep. No. 99-313, at 694-695 (1986); *see also* H. Rep. No. 99-426, at 178 (1986). Accordingly, the court holds that Stationers' projects fail to meet the technological in nature requirement under § 41(d)(1)(B)(i).

2. Process of Experimentation

To be considered qualified research, a project must also be research for which "substantially all of the activities constitute elements of a process of experimentation" for one of the following purposes:

> (i) a new or improved function,
>
> (ii) a new or improved performance; or
>
> (iii) reliability or quality.

26 U.S.C. § 41(d)(1)(C) (*referring to* 26 U.S.C. § 41(d)(3)(A)). Stationers' projects meet the latter part of this requirement, in that they were implemented to improve function, performance and reliability. At issue, however, is whether the projects were implemented as part of a "process of experimentation."

Experimentation is defined as "the act, process, or practice of making experiments." *Webster's Third New International Dictionary Unabridged* 800 (1993). Experiment is defined as "a test or trial" or "a tentative procedure or policy; [especially] one adopted in uncertainty as to whether it will answer the desired purpose or bring about the desired result." *Id.* While consistent with the

above definition, the legislative history on the meaning of "process of experimentation" provides further explanation:

> The term process of experimentation means a process of involving the evaluation of more than one alternative designed to achieve a result where the means of achieving that result is uncertain at the outset. This may involve developing one or more hypotheses, testing and analyzing those hypotheses (through, for example, modeling or simulation), and refining or discarding the hypotheses as part of a sequential design process to develop the overall component.
>
> Thus, for example, costs of developing a new or improved business component are not eligible for the credit if the method of reaching the desired objective (the new or improved product characteristics) is readily discernible and applicable as of the beginning of the research activities, so that true experimentation in the scientific or laboratory sense would not have to be undertaken to develop, test, and choose among viable alternatives. . . . [E]ngineers who design a new computer system, or who design improved or new integrated circuits for use in computer or other electronic products, are engaged in qualified research because the design of those items is uncertain at the outset and can only be determined through a process of experimentation relating to specific design hypotheses and decisions as described above.

H.R. Rep. Conf. Rep. No. 99-841, at II-72 (1986).

This language is also consistent with legislative history predating the enactment of § 41. Initially, the credit

for increasing research activities was enacted as 26 U.S.C. § 44F, then redesignated § 30, and finally, changed to § 41. In discussing the former § 44F in the Tax Incentive Act of 1981 (H.R. 4242), the Committee on Ways and Means stated that only the costs of developing new or significantly improved computer programs, where their operational feasibility was seriously in doubt, could be included in computing the credit under § 44F. H.R. Rep. No. 97-201, at 114 (1981). Therefore, the court must decide how much uncertainty, if at all, existed about the projects' designs at the outset of their development by Stationers.

In its objections to the Magistrate Judge's Report, Stationers does not adequately address whether the development of the projects involved any degree of uncertainty. Rather, Stationers merely makes the following conclusory statement: "[T]he uncertainty that was involved in this process is identified in each project summary." (Plaintiff's Memorandum in Support of Objections at 12.) A review of each project summary reveals that Stationers' claim of uncertainty is not persuasive. (*See* Agreed Statement of Facts, Exhibits 3-9.) In these summaries, Stationers repeatedly refers to its inability to predict the eventual results of each project once in operation and applied. For instance, in describing the "Concept 90" project, Stationers refers to its concern as to whether any benefits such as increased sales, dealer acceptance, and ordering efficiencies would materialize once the project was in operation. (Agreed Statement of Facts, Exhibit 5, p. 2). Similarly, while describing the "CIP" project, Stationers refers to its uncertainty about whether the project would "provide an adequate return on [Stationers'] investment of time, money and resources." (Agreed

Statement of Facts, Exhibit 4, p. 2.) Absent in any of these summaries, however, is an adequate account describing any uncertainty about the projects' designs that Stationers faced at the outset of developing these projects. In other words, while the aspired benefits of the projects were in doubt, the development of the means that would allow Stationers to potentially achieve those benefits was not. *See also* S. Rep. No. 99-313, at 696 (1986) (process of experimentation "means a process of scientific experimentation or engineering activities to design a business component where the design of the component as a whole is uncertain at the outset. . . . ") As such, the development of Stationers' projects did not entail a process of experimentation.[3]

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[3] The court is in agreement with the Magistrate Judge's analysis of the requirement of a process of experimentation:

> Congress envisioned the tax credit for ventures into uncharted territory. The activities undertaken by Plaintiffs in developing the [projects] do not rise to the level of required experimentation. First, it is not even clear what "hypotheses" Plaintiff was "researching". Furthermore, Plaintiff's research did not venture into an uncertain field, nor did it provide the technology to utilize computers in a manner that was never before available. To the contrary, computers and computer software had long been used as a device to increase business efficiency. The capacity of computers to be utilized as a tool for bookkeeping was not uncertain, nor was there any uncertainty as to whether a computer could perform these functions. Finally, the goal of Plaintiff's "research" was to enable greater utilization of the computer for its *own* business purposes, by utilizing already established technology, not to develop a new realm of science.

C. Computer Software Exclusion

1. Software primarily for internal use

Though the projects' failure to meet either of § 41's general requirements under subsection (d)(1) results in the denial of Stationers' claim, the court will also examine whether § 41(d)(4)(E) precludes Stationers' receipt of the credit. Section 41(d)(4)(E) provides that research that would otherwise qualify under § 41 is excluded from receiving the credit if the research was for the development of "internal use" computer software. § 41(d)(4)(E). The Magistrate Judge, while assuming *arguendo* that Stationers met all the other requirements under § 41, concluded that the credit was still unavailable because Stationers' projects were expressly excluded as "internal use" computer software. The Magistrate Judge examined the legislative history of § 41 and reasoned that Congress' intent was "to allow the credit only where the research and resulting developments extend beyond the front door of the developer to help the American economy." Report at 12. Stationers objects to the Magistrate Judge's conclusion and argues that its projects were not internal use software, but rather software used in Stationers' core business (*e.g.*, sales, marketing, purchasing, inventory control, warehousing and delivery) for which it earns revenue from customers.

Like the general requirements under § 41, the exclusion "software that is developed primarily for internal

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Report at 10. We would add that purchasing a software package from a business consulting firm in 1988, albeit it was used only as a "building block," did not take Stationers to the cutting edge of technological advancement.

use" is not defined in the statute, Treasury Regulations, or case law. The Conference Report on § 41 explained that software used for "general and administrative functions (such as payroll, bookkeeping, or personnel management) or in providing noncomputer services (such as accounting, consulting, or banking services)" are examples of internal use software and, thus, excluded from the statute. H.R. Rep. Conf. Rep. No. 99-841, at II-73 (1986). Additionally, the Treasury's Proposed Regulations state that "all relevant facts and circumstances are to be considered in determining if computer software is developed primarily for the taxpayer's internal use." *See* Prop. Treas. Reg. § 1.41-4(e), 62 Fed. Reg. 82 (1997). Though the Proposed Regulations are not binding, the court agrees that a "totality of the circumstances" is the most appropriate standard to judge whether Stationers' developed its projects primarily for internal use.

Under a totality of the circumstances test, the court holds that the Magistrate Judge was correct in concluding that Stationers' projects were developed primarily for internal use. For instance, the DRRS project allowed Stationers to store and view invoice data and sales history on-line. The same can be said about the Central Invoice Project ("CIP"), which centralized Stationers' invoices online and eliminated the inefficiencies associated with maintaining hardcopy data. Also, Stationers developed the Concept 90 project to streamline its ordering operations and pricing. Though the Unilink system served outside vendors, it was essentially an inventory control system designed to modernize Stationers' ordering system and to allow Stationers to bill orders from other divisions. Likewise, the Facility Database Project ("FDP")

was designed to achieve hierarchy of data with respect to inventory items and eliminate any redundancy of data. As the name indicates, the Forecasting/Replenishment Application was designed to forecast inventory levels and allow for quick replenishment of items out-of-stock. The goal of the Automated Inbound Shipment Processing Program ("SCS") was to improve shipping operations in conjunction with the Receiving System project. Under that latter project, Stationers sought to improve performance and reliability in warehouse productivity, reduce time for merchandise on the receiving dock, increase inventory turnover, and improve inventory accuracy. Stationers concedes that the term internal use "by its plain meaning implies utilization within the confines of an organized structure. . . . " (Plaintiff's Memorandum in Support of Objections at 5). Indeed, a review of each of Stationers' projects reveals that they were designed for internal use.

This review also supports the Government's assertion that the projects were developed "to provide essentially bookkeeping services in tracking [Stationers'] massive inventory and allowing plaintiff to fill orders and price those orders to stay competitive." (Government's Response to Plaintiff's Objections at 9.) In the long run, of course, these projects would also benefit Stationers' customers in that reduced inefficiencies would lead to reduced costs, and ideally, to reduced prices. However, the ultimate benefit that Stationers' customers would potentially receive does not obscure that Stationers' projects were primarily for internal use. As such, Stationers' argument that its projects encompassed substantial external use is not persuasive. To the contrary, the

functions of each project are sufficiently similar to the ones that the Conference Report included in its list of examples of internal use software. Moreover, it appears that the projects were developed, at least in part, to improve Stationers' management accounting system.[4] Accordingly, the court holds that Stationers' projects were the type of internal use software that Congress specifically sought to exclude from the § 41 research credit.

2. Exception to the Internal Use Exclusion

Though Stationers developed its projects primarily for internal use, it could still arguably be entitled to the tax credit under an exception to § 41's internal use exclusion. *See* H.R. Rep. Conf. Rep. No. 99-841, at II-73 (1986).[5] The exception allows a tax credit for internal use software if the software is innovative, the software development involved a significant economic risk, and the software is not commercially available. *Id.* After the parties agreed that Stationers' projects were not commercially available,

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[4] "Management accounting, focusing on internal customers, is the process of identification, measurement, accumulation, analysis, preparation, interpretation, and communication of information that assists executives in fulfilling organizational goals. A synonym is internal accounting." Charles T. Horngren & George Foster, *Cost Accounting, A Managerial Emphasis*, at 4 (7th ed. 1991).

[5] In the Conference Report, the conferees intended that the exception would be included in the forthcoming issuance of Treasury Regulations on § 41. However, the Treasury has yet to adopt Final Regulations on § 41. *See, supra* page 5. Nonetheless, the exception is included in the Conference Report and the Proposed Regulations. *See* Prop. Treas. Reg. § 1.41-4(e)(5).

the Magistrate Judge concluded that the projects failed to meet the other two requirements under the exception. Thus, the court will limit its discussion to whether Stationers' projects were innovative and whether they involved a significant economic risk.

With respect to the first requirement, legislative history defines "innovative" to be "where the software results in a reduction in cost, or improvement in speed, that is substantial and economically significant." *Id.*[6] Though the Magistrate Judge was correct in reasoning that Stationers' projects "simply increased efficiency and revenues for Plaintiff," a review of each project summary indicates that they all fall under the plain meaning of the definition included in the legislative history. Thus, the court disagrees with the Magistrate's conclusion on this prong, and holds that Stationers' projects were innovative.

Innovation is not enough, however. Stationers' projects fail to qualify for the exception because they do not meet the second requirement, *i.e.*, the involvement of significant economic risk. The Conference Report defines "significant economic risk" as "where the taxpayer commits substantial resources to the development and also there is substantial uncertainty, because of technical risk, that such resources would be recovered within a reasonable period." *Id.* Based on this definition, the Magistrate

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[6] The Proposed Regulations addressing § 41 heighten this requirement by stating that the "legislative history indicates that Congress intended to limit the credit for the costs of developing internal-use software to software meeting a high threshold of innovation." Prop. Treas. Reg. § 1.41-4(e)(6).

Judge determined that Stationers' projects did not involve significant economic risk because "the ability to implement [the projects] was clear from the outset. The only risk or uncertainty was whether the [projects] would produce the desired efficiency, not whether they could, in fact, be developed." Report at 13. The court agrees. Granted, Stationers invested considerable sums of money for the development of its projects. However, Stationers' claim that "[i]t is the uncertainty of success that creates the risk" is simply not persuasive. Of course, spending over a million dollars ordinarily has inherent risks, but the amount of the expenditure is not a dispositive factor. The proper inquiry is on the technical risk, which refers to the ability of Stationers to develop the projects. Here, there was not substantial uncertainty because the technical risk was minimal, if at all. Therefore, because the projects do not meet this prong of the exception, Stationers fails to overcome the internal use exclusion.

III. CONCLUSION

Stationers has failed to show that its projects met the requirements for a tax credit under 26 U.S.C. § 41. Accordingly, the court denies Stationers' claim for a tax credit for increasing research activities.[7]

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[7] Several parties not directly involved in this case moved for leave to file briefs as amicus curiae. The court denied the parties' motions because it determined that the Government and Stationers adequately and thoroughly addressed the issue at bar. Moreover, the court believed that any amicus curiae briefs would not provide further enlightenment. Recently, Chief Judge Posner wrote an insightful opinion on amicus curiae briefs that confirmed the reasoning behind the court's decision.

IT IS SO ORDERED.

ENTER:

/s/ Charles Ronald Norgle, Sr.
CHARLES RONALD
NORGLE, SR., Judge
United States District Court

DATED: 10-17-97

See Ryan v. Commodity Futures Trading Commission, No. 97-2120, 1997 WL 572412, at *1 (7th Cir. September 16, 1997). Chief Judge Posner opined:

> The vast majority of amicus curiae briefs are filed by allies of litigants and duplicate the arguments made in the litigants' briefs, in effect merely extending the length of the litigant's brief. Such amicus briefs should not be allowed. They are an abuse. The term "amicus curiae" means friend of the court, not friend of a party.

Id.

IN THE
UNITED STATES COURT OF APPEALS
FOR THE SEVENTH CIRCUIT

UNITED STATIONERS INC.,	)	Appeal from the United States District Court for the Northern District of Illinois, Eastern Division
Plaintiff-Appellant,	)	
vs.	)	No. 92 C 6065
UNITED STATES OF AMERICA,	)	Honorable Charles R. Norgle, Sr., Judge Presiding
Defendant-Appellee.	)	

NOTICE OF FILING

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PLEASE TAKE NOTICE that we have this 17th day of February, 1998, filed with the Clerk of the United States Court of Appeals for the Seventh Circuit the following documents:

Brief and Argument of Appellant United Stationers Inc.

Supplemental Appendix of Appellant United Stationers Inc.

Copies of which are herewith served upon you.

Dated: February 17, 1998

Respectfully submitted,

/s/ Kenneth Shepro
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CERTIFICATE OF SERVICE

KENNETH C. SHEPRO, one of the attorneys for the Appellant, United Stationers Inc., certifies that he served this Notice of Filing, together with Appellant United Stationers Inc.'s Brief and Argument and Appellant's Supplemental Appendix on the counsel of record shown on the aforesaid notice, by depositing copies thereof in the United States mail at 10 S. Wacker Dr. Chicago, IL 60606, properly addressed, with postage prepaid, this 17th day of February, 1998.

/s/ Kenneth C. Shepro
Kenneth C. Shepro

APPENDIX E

IN THE UNITED STATES DISTRICT COURT FOR THE NORTHERN DISTRICT OF ILLINOIS EASTERN DIVISION

UNITED STATIONERS INC., Plaintiff, v. UNITED STATES OF AMERICA, Defendant.	Civil Action No. 92 C 6065 Judge Charles R. Norgle, Sr. Magistrate Judge Arlander Keys

NOTICE OF APPEAL

(Filed Dec. 19, 1997)

Notice is hereby given that Plaintiff **UNITED STATIONERS, INC.**, a Delaware corporation, hereby appeals to the United States Court of Appeals for the Seventh Circuit from the Order entered in this action on October 21, 1997, entering judgment in favor of the Defendant **UNITED STATES OF AMERICA** on the Plaintiff's Complaint for a refund of 1988 federal income taxes.

Dated: December 19, 1997

Respectfully submitted,

UNITED STATIONERS INC.,
a Delaware corporation

By: /s/ Kenneth Shepro
One of its attorneys

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APPENDIX F

UNITED STATES DISTRICT COURT
NORTHERN DISTRICT OF ILLINOIS
EASTERN DIVISION

UNITED STATIONERS, INC., Plaintiff,	)	No. 92 C 6065
v.	)	Judge Charles R. Norgle, Sr.
UNITED STATES OF AMERICA, Defendant.	)	Magistrate Judge Arlander Keys

TO: THE HONORABLE CHARLES R. NORGLE, SR.
UNITED STATES DISTRICT COURT JUDGE

REPORT AND RECOMMENDATION

This matter comes before the Court pursuant to Plaintiff United Stationers, Inc.'s claim for a tax credit under Internal Revenue Code 26 U.S.C. § 41 ("§ 41") for increasing research activities. For the following reasons, the Court recommends that Plaintiff's claim be denied.

BACKGROUND

In 1981, the United States continued its steady shift from an industrial based economy to an economy thriving on technology. 141 CONG. REC. S2124 (daily ed. Jan. 30, 1995) (statement of Sen. Hatch). Congress recognized the economy's shift, as well as the need for an increase in American research and development. Congress also had serious concerns about the substantial decline in the

country's expenditure towards research and experimentation, and sought to encourage businesses to perform research that would increase the competitiveness, efficiency, and innovative qualities of the United States economy. H.R. REP. No. 99-426, 99th Cong., pt. 1, at 177 (1985). International competitors were seen as a threat to the vitality of United States companies, and it was feared that the competitiveness and quality of American business would soon be overtaken by the fast growing foreign competitors. 141 CONG. REC. S2124 (daily ed. Jan. 30, 1995) (statement of Sen. Hatch).

Thus, in 1981, with goals set on stimulating private research, fostering leadership in new technology, promoting the emergence of new business, and enhancing capital formation and productivity of the United States economy, Congress enacted a tax incentive designed to increase business research and experimentation.[1] 141 CONG. REC. S2124 (daily ed. Jan. 30, 1995) (statement of Sen. Hatch). Congress was aware that the credit would be an addition to the already existing deduction under § 174 for research expenditures, and, therefore, would provide substantial tax benefits to companies. In order to ensure that the generous incentive was only utilized by companies engaging in research that would lead American business

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[1] The credit for increasing research activities was initially enacted as 26 U.S.C. § 44F, then redesignated as § 30, and, finally, changed to § 41. Although Congress voted to enact § 41 into permanent law, President Clinton vetoed the law (as part of the Seven Year Balanced Budget Reconciliation Act of 1995). *See* 141 CONG. REC. S2124 (Jan. 30, 1995) (statement of Sen. Hatch). Currently, the tax credit is pending "re-introduction" through three different bills.

to the forefront of the international competitive market, Congress developed stringent criteria for obtaining the credit. Specifically, Congress: (1) provided express requirements that must be met; (2) expressly excluded use of the credit in certain circumstances; and (3) temporarily enacted the credit in order to evaluate it before deciding whether to make it permanently available. S. REP. No. 99-313, at 694 (1986).

FACTS

The facts in this case have been stipulated to be both parties. Plaintiff, through its subsidiaries, is the nation's largest independent office products wholesaler. After a rapid growth rate in annual sales, Plaintiff was unable to satisfy consumer demand, and decided to automate and computerize many of its business operations. Specifically, Plaintiff developed seven different computer software programs with individual functioning purposes (the software programs will be collectively referred to herein as the "Seven Programs"): (1) Document Retention and Retrieval System which maintains files, customer histories, and purchase records; (2) Central Invoice Project which allows for paper less invoicing and record keeping; (3) Concept 90 which runs a marketing program; (4) Unilink which facilitates a computer-to-computer order entry system; (5) Facility Data Base Project which handles inventory records, and forecasting and replenishment; (6) Automated Inbound Shipment Processing Program which automates shipping procedures; and (7) Forecasting/ Replenishment application software which provides more timely inventory control and planning system with a flexible forecasting routine having the ability to pre-set

variables allowing for tighter inventory control. (Agreed Statement of Facts, ¶¶ 16-39.)

The Seven Programs were used generally in Plaintiff's business and not resold or offered to the public. Pursuant to § 41, Plaintiff seeks a $156,457 tax credit for money spent increasing research activities and developing the Seven Programs. Plaintiff has already claimed a deduction under Internal Revenue Code 26 U.S.C. § 174 ("§ 174") for research and experimental expenditures relating to the Seven Programs.

DISCUSSION

I. Credit For Increasing Research and Development

Section 41 provides a tax credit for certain business expenses incurred due to increased research activities. A deduction for research and development expenses is separately allotted to taxpayers under § 174. Therefore, enactment of the § 41 credit provided a greater incentive for research and experimentation, because qualifying activities could obtain *both* a deduction under § 174, and a credit under § 41. Additionally, a credit is more advantageous than a deduction because, after tax liability has been assessed, the credit reduces the liability by a specific amount. JAMES J. FREELAND, STEPHEN A. LIND & RICHARD B. STEPHENS, FUNDAMENTALS OF FEDERAL INCOME TAXATION 972 (9th ed. 1996). In contrast, a deduction comes off the income before tax liability has been assessed and, therefore, any savings is dependent upon tax bracket calculations. *Id.* Furthermore, unlike deductions, credits not needed to offset income in the present year can be carried

back three years and carried forward fifteen years to offset past and future tax liability. *Id.*

Consequently, because § 41 provides an additional, more advantageous incentive to private sector research and development than the deduction provided by § 174, the requirements for the credit are much more stringent. Applicability of the credit is limited to "qualified research" expenditures within the prescribed criteria of the statute, and is also limited by explicit exclusions. Beyond meeting the criteria of § 174, and qualifying for the deduction, credit under § 41 is only obtainable if the research: (1) was undertaken for the purpose of discovering information which is technological in nature, (2) is intended to be useful in the development of a new or improved business component, and (3) was developed through a "process of experimentation." 26 U.S.C. § 41(d)(1) (1986). Further, expenditures that are expressly prohibited from qualifying for the credit include research for the development of "internal use" computer software. 26 U.S.C. § 41(d)(4)(E).

Despite § 41's express criteria and exclusions, the scope and applicability remain ambiguous. In fact, there is very little caselaw even discussing the issue. Therefore, this Court looks to the legislative history of the statute, as well as its plain language, in its analysis of the statute's applicability to Plaintiff's development of the Seven Programs.

II. Express Statutory Language of § 41

A. Qualified Research: Four Requirements

The language of § 41 provides that a tax credit is allowed for a trade or business that has incurred expenses conducting "qualified research." 26 U.S.C. § 41(a). Initially, the issue here is whether the Seven Programs should be considered "qualified research." The language of § 41 provides that research qualifies for the credit if: (1) it qualifies as a deduction under § 174; (2) it "is undertaken for the purpose of discovering information . . . which is technological in nature"; (3) it is "intended to be useful in the development of a new or improved business component of the taxpayer . . . "; and (4) "substantially all of the activities of [the research] constitute elements of a process of experimentation. . . . " 26 U.S.C. § 41(d)(1).

Only two of these four requirements are contested, since the parties concede the first and third have been met. Therefore, the Court's determination is limited to whether Plaintiff's research was "technological in nature" and whether it was developed through a "process of experimentation".

1. Technological in Nature

The language of § 41 simply states that "the term qualified research means . . . research which is undertaken for the purpose of discovering information which is technological in nature. . . . " 26 U.S.C. § 41(d)(1)(B). The statute does not provide further guidance beyond this language. The word "technological" is defined as "the

application of knowledge to practical purposes: applied science." WEBSTER'S THIRD NEW INTERNATIONAL DICTIONARY, UNABRIDGED 2348 (1986). To further discover what was intended by the "technological" requirement, the Court looks to the legislative history and any available caselaw.

The requirement that qualified research be technological in nature was added in a 1986 amendment to § 41, because Congress believed that the definition of qualified research was being applied too broadly. *TSR, Inc. v. Commissioner of Internal Revenue*, 96 T.C. 903, 919 (1991). Legislative history reveals Congressional frustration because the credit was being over-utilized by application to almost any expenditure relating to product development, and because businesses that did not engage in "high technology activities" were receiving the tax credit. S. REP. No. 99-313, at 694-96 (1986).

This supports the rationale that "technological in nature" encompasses research that benefits aspects of the country's economy by changing the way machines, and therefore businesses, operate, Here, Plaintiff's research merely altered the productivity of its own marketing scheme and inventory control.While it is true that Plaintiff applied existing technology and developed software, based upon Congress' expressed intent to use § 41 to boost the American economy and encourage widely applicable, high technology advancements, Plaintiff's Seven Programs are insufficient to warrant the tax credit. Thus, this Court finds that merely adding a new program to a computer so that it becomes a more efficient tool for a particular business does not amount to a development which is technological in nature. to find otherwise would distort Congressional intent in offering the generous tax

credit embodied in § 41 because the phrase "technological in nature" would mean nothing more than adapting previously existing technology to particular situations.

2. Process of Experimentation

The other element in dispute is whether a "process of experimentation" was utilized in Plaintiff's research. Process of experimentation" means a process of scientific experimentation or engineering activities to design a business component where the design of the component as a whole is uncertain at the outset. . . . " S. REP. No. 99-313, at 696 (1986). A process of experimentation involves the use of "one or more hypotheses for specific design decisions, testing and analy[sis of] those hypotheses. . . . " *Id.* The process of experimentation must involve a level of uncertainty such that texting and hypotheses are necessarily utilized in order to develop the desired product. *Id.* For example, as the Senate Committee stated, "engineers who design a new computer system, or who design improved or new integrated circuits for use in computer or other electronic products, are engaged in qualified research because the design of those items is uncertain at the outset." S. REP. NO. 99-313, at 696 (1986).

The requirement of a process of experimentation dovetails the requirement that the research be technological in nature, and supports the Court's conclusion that Congress envisioned the tax credit for ventures into uncharted territory. The activities undertaken by Plaintiffs in developing the Seven Programs do not rise to the required level of experimentation. First, it is not even

clear what "hypotheses" Plaintiff was "researching". Furthermore, Plaintiff's research did not venture into an uncertain field, nor did it provide the technology to utilize computers in a manner that was never before available. To the contrary, computers and computer software had long been used as a device to increase business efficiency. The capacity of computers to be utilized as a tool for bookkeeping was not uncertain, nor was there uncertainty as to whether a computer could perform these functions. Finally, the goal of Plaintiff's "research" was to enable greater utilization of the computer for its *own* business purposes, by utilizing already established technology, not to develop a new realm of computer science.

B. Exclusions

Beyond meeting the aforementioned requirements, an entity seeking the tax credit must also successfully avoid exceptions enumerated by Congress. Even if all of the other requirements are met, a business will not be entitled to the credit if its research falls into one of eight expressly precluded areas. *See generally* 26 U.S.C. § 41(d)(4). In particular, § 41 prohibits from receiving the credit, "[e]xcept to the extent provided in regulations, any research with respect to computer software which is developed by (or for the benefit of) the taxpayer primarily for internal use by the taxpayer. . . . " 26 U.S.C. § 41(d)(4)(E). Thus, even assuming, *arguendo,* that Plaintiff met all other requirements of § 41, the tax credit is still unavailable because it is expressly excluded as "internal use" computer software.

The general rule of excluding internal use computer software from eligibility for the tax credit follows from the Congressional intent to allow the credit only where the research and resulting developments extend beyond the front door of the developer to help the American economy. Software that is used for "general and administrative functions (such as payroll, bookkeeping, or personnel management) or in providing noncomputer services (such as accounting, consulting, or banking services)" have been defined as internal use software functions specifically excluded from the statute. Tax Reform Act of 1986, P.L. 99-514 at II-73 (1986). Because most internal use software does not meet the goal of enhancing the American economy, it is ineligible for the tax credit. There is, however, an exception to the exclusion of internal use software – the tax credit is available for internal use software that is innovative, involved a significant economic risk, *and* is commercially unavailable.[2]

Plaintiff must meet all three requirements in order to overcome the internal use software exclusion. The first requirement, that the research be "innovative" means that it must provide a substantially significant improvement in speed, as well as a reduction in cost, that is economically significant. Tax Reform Act of 1986, P.L. 99-514 at II-73 (1986). To overcome the exclusion, the internal use software must also have been developed through

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[2] Although regulations for § 41 were never written, the legislative history reveals that, in order to be eligible for the tax credit, internal use software must be: (1) innovative; (2) a significant economic risk; and (3) commercially unavailable for use by the taxpayer. Tax Reform Act of 1986, P.L. 99-514 at II-73 (1986).

research that presented a "significant economic risk" to the taxpayer. Significant economic risk occurs where the taxpayer commits substantial resources to the project, despite considerable uncertainty that the dedicated resources will not be recovered. *Id.* The final requirement is that the research must undertake to discover or create something that is not "commercially available" at the time. Non-commercial availability means that the "software cannot be purchased, leased, or licensed, and used for the intended purpose without modifications that would satisfy the [other] two requirements. . . . " Tax Reform Act of 1986, P.L. 99-514 at II-73 (1986).

Here, Plaintiff's internal use software does not overcome the exclusion, because the Seven Programs do not meet all three exception criteria. The parties agree that the software was not commercially available, thereby meeting the third requirement. However, Plaintiff fails to meet the other two requirements and, is therefore, not entitled to the tax credit. The Seven Programs were not innovative, nor did they create a revolutionary new way to organize businesses, such that the efficiency or productivity of the market would be greatly affected. Rather, the Seven Programs simply increased efficiency and revenues for Plaintiff. Further, the development of the Seven Programs did not involve an economic risk, since the ability to implement them was clear from the outset. The only risk or uncertainty was whether the Seven Programs would produce the desire efficiency, not whether they could, in fact, be developed. Moreover, inventory control, bookkeeping, order processing and marketing strategies are all internal, "behind the scenes" functions of a business. Although improved efficiency "behind the scenes"

is traceable to a more productive business environment, this does not elevate internal use software into a market enhancing product. Thus, even if Plaintiff's software development expenses, *arguendo*, could be deemed "qualified research," they would still be excluded from receiving a tax credit under § 41 because the Seven Programs fail to meet the criteria necessary to be considered exceptions to the internal use exclusion.

CONCLUSION

The Court finds that requirements of § 41 have not been met. Therefore, this court recommends that Plaintiff be denied the tax credit (and interest) which it seeks under § 41.

DATED: March 18, 1997

RESPECTFULLY SUBMITTED:

/s/ Arlander Keys
ARLANDER KEYS
United States Magistrate Judge

Counsel have ten days from the date of service to file objections to this Report and Recommendation with the Honorable Charles R. Norgle, Sr. *See* FED. R.CIV. P. 72(b); 28 U.S.C. § 636(b)(1). Failure to object constitutes a waiver of the right to appeal. *Eger v. Connecticut Gen. Life Ins. Co.*, 900 F.2d 1032, 1039 (7th Cir. 1990).

SEC. 41. CREDIT FOR INCREASING RESEARCH ACTIVITIES.

(a) General Rule. – For purposes of section 38, the research credit determined under this section for the taxable year shall be an Amount equal to the sum of –

(1) 20 percent of the excess (if any) of –

(A) the qualified research expenses for the taxable year, over

(B) the base period research expenses, and

(2) 20 percent of the basic research payments determined under subsection (e)(1)(A).

(b) Qualified Research Expenses. – For purposes of this section –

(1) Qualified research expenses. – The term "qualified research expenses" means the sum of the following amounts which are paid or incurred by the taxpayer during the taxable year in carrying on any trade or business of the taxpayer –

(A) in-house research expenses, and

(b) contract research expenses.

(2) In-house research expenses. –

(A) in general. – The term "in-house research expenses" means –

(i) any wages paid or incurred to an employee for qualified services performed by such employee,

(ii) any amount paid or incurred for supplies used in the conduct of qualified research, and

(iii) under regulations prescribed by the Secretary, any amount paid or incurred to another person for the right to use computers in the conduct of qualified research.

Clause (iii) shall not apply to any amount to the extent that the taxpayer (or any person with whom the taxpayer must aggregate expenditures under subsection (f)(1)) receives or accrues any amount from any other person for the right to use substantially identical personal property.

(B) Qualified services. – The term "qualified services" means services consisting of –

(i) engaging in qualified research, or

(ii) engaging in the direct supervision or direct support of research activities which constitute qualified research.

If substantially all of the services performed by an individual for the taxpayer during the taxable year consists of services meeting the requirements of clause (i) or (ii), the term "qualified services" means all of the services performed by such individual for the taxpayer during the taxable year.

(C) Supplies. – The term "supplies" means any tangible property other than –

(i) land or improvements to land, and

(ii) property of a character subject to the allowance for depreciation.

(D) Wages. –

(i) In general. – The term "wages" has the meaning given such term by section 3401(a).

(ii) Self-employed individuals and owner-employees. – In the case of an employee (within the meaning of section 401(c)(1)), the term "wages" includes the earned income (as defined in section 401(c)(2)) of such employee.

(iii) Exclusion for wages to which targeted jobs credit applies. – The term "wages" shall not include any amount taken into account in determining the targeted jobs credit under section 51(a).

(3) Contract research expenses. –

(A) In general. – The term "contract research expenses" means 65 percent of any amount paid or incurred by the taxpayer to any person (other than an employee of the taxpayer) for qualified research.

(B) Prepaid amounts. – If any contract research expenses paid or incurred during any taxable year are attributable to qualified research to be conducted after the close of such taxable year, such amount shall be treated as paid or incurred during the period during which the qualified research is conducted.

(c) Base Period Research Expenses. – For purposes of this section –

(1) In general. – The term "base period research expenses" means the average of the qualified research expenses for each year in the base period.

(2) Base period. –

(A) In general. – For purposes of this subsection, the term "base period" means the 3 taxable years immediately preceding the taxable year for which the determination is being made (hereinafter in this subsection referred to as the "determination year").

(B) Transitional rules. – Subparagraph (A) shall be applied –

(i) by substituting "first taxable year" for "3 taxable years" in the case of the first determination year ending after June 30, 1981, and

(ii) by substituting "2" for "3" in the case of the second determination year ending after June 30, 1981.

(3) Minimum base period research expenses. – In no event shall the base period research expenses be less than 50 percent of the qualified research expenses for the determination year.

(d) Qualified Research Defined. – For purposes of this section –

(1) In general. – The term "qualified research" means research –

(A) with respect to which expenditures may be treated as expenses under section 174.

(B) which is undertaken for the purpose of discovering information –

(i) which is technological in nature, and

(ii) the application of which is intended to be useful in the development of a new or improved business component of the taxpayer, and

(C) substantially all of the activities of which constitute elements of a process of experimentation for a purpose described in paragraph (3).

Such term does not include any activity described in paragraph (4).

(2) Tests to be applied separately to each business component. – For purposes of this subsection –

(A) In general. – Paragraph (1) shall be applied separately with respect to each business component of the taxpayer.

(B) Business component defined. – The term "business component" means any product, process, computer software, technique, formula, or invention which is to be –

(i) held for sale, lease, or license, or

(ii) used by the taxpayer in a trade or business of the taxpayer.

(C) Special rule for production processes. – Any plant process, machinery, or technique for commercial production of a business component shall be treated as a separate business component (and not as part of the business component being produced).

(3) Purposes for which research may qualify for credit. – For purposes of paragraph (1)(C) –

(A) In general. – Research shall be treated as conducted for a purpose described in this paragraph if it relates to –

(i) a new or improved function.

(ii) performance, or

(iii) reliability or quality.

(B) Certain purposes not qualified. – Research shall in no event be treated as conducted for a purpose described in this paragraph if it relates to style, taste, cosmetic, or seasonal design factors.

(4) Activities for which credit not allowed. – The term "qualified research" shall not include any of the following:

(A) Research after commercial production. – Any research conducted after the beginning of commercial production of the business component.

(B) Adaptation of existing business components. – Any research related to the adaptation of an existing business component to a particular customer's requirement or need.

(C) Duplication of existing business component. – Any research related to the reproduction of an existing business component (in whole or in part) from a physical examination of the business component itself or from plans, blueprints, detailed specifications, or publicly available information with respect to such business component.

(d) Surveys, studies, etc. – any –

(i) efficiency survey,

(ii) activity relating to management function or technique,

(iii) market research, testing, or development (including advertising or promotions),

(iv) routine data collection, or

(v) routine or ordinary testing or inspection for quality control.

(E) Computer software. – Except to the extent provided in regulations, any research with respect to computer software which is developed by (or for the benefit of) the taxpayer primarily for internal use by the taxpayer, other than for use in –

(i) an activity which constitutes qualified research (determined with regard to this subparagraph), or

(ii) a production process with respect to which the requirements of paragraph (1) are met.

(F) Foreign research. – Any research conducted outside the United States.

(G) Social sciences, etc. – Any research in the social sciences, arts, or humanities.

(H) Funded research. – Any research to the extent funded by any grant, contract, or otherwise by another person (or governmental entity).

(e) Credit Allowable With Respect to Certain Payments to Qualified Organizations for Basic Research. – For purposes of this section –

(1) In general. – In the case of any taxpayer who makes basic research payments for any taxable year –

(A) the amount of basic research payments taken into account under subsection (a)(2) shall be equal to the excess of –

(i) such basic research payments, over

(ii) the qualified organization base period amount, and

(B) that portion of such basic research payments which does not exceed the qualified organization base period amount shall be treated as contract research expenses for purposes of subsection (a)(1).

(2) Basic research payments defined. – For purposes of this subsection –

(A) In general. – The term "basic research payment" means, with respect to any taxable year, any amount paid in cash during such taxable year by a corporation to any qualified organization for basic research but only if –

(i) such payment is pursuant to a written agreement between such corporation and such qualified organization, and

(ii) such basic research is to be performed by such qualified organization.

(B) Exception to requirement that research be performed by the organization. – In the case of a qualified organization described in subparagraph (C) or (D) of paragraph (6), clause (ii) of subparagraph (A) shall not apply.

(3) Qualified organization base period amount. – For purposes of this subsection, the term "qualified organization base period amount" means an amount equal to the sum of –

(A) the minimum basic research amount, plus

(B) the maintenance-of-effort amount.

(4) Minimum basic research amount. – For purposes of this subsection –

(A) In general. – The term "minimum basic research amount" means an amount equal to the greater of –

(i) 1 percent of the average of the sum of amounts paid or incurred during the base period for –

(I) any in-house research expenses, and

(II) any contract research expenses, or

(ii) the amounts treated as contract research, expenses during the base period by reason of this subsection (as in effect during the base period).

(B) Floor amount. – Except in the case of a taxpayer which was in existence during a taxable year (other than a short taxable year) in the base period, the minimum basic research amount for any base period shall not be less than 50 percent of the basic research payments for the taxable year for which a determination is being made under this subsection.

(5) Maintenance-of-effort amount. – For purposes of this subsection –

(A) In general. – The term "maintenance-of-effort amount" means, with respect to any taxable year, an amount equal to the excess (if any) of –

(i) an amount equal to –

(I) the average of the nondesignated university contributions paid by the taxpayer during the base period, multiplied by

(II) the cost-of-living adjustment for the calendar year in which such taxpayer year begins, over

(ii) the amount of nondesignated university contributions paid by the taxpayer during such taxable year.

(B) Nondesignated university contributions. – For purposes of this paragraph, the term "nondesignated university contribution" means any amount paid by a taxpayer to any qualified organizations described in paragraph (6)(A) –

(i) for which a deduction was allowable under section 170, and

(ii) which was not taken into account –

(I) in computing the amount of the credit under this section (as in effect during the base period) during any taxable year in the base period, or

(II) as a basic research payment for purposes of this section.

(C) Cost-of-living adjustment defined. –

(i) In general. – The cost-of-living adjustment for any calendar year is the cost-of-living adjustment for such calendar year determined under section 1(f)(3).

(ii) Special rule where base period ends in a calendar year other than 1983 or 1984. – If the base period of any taxpayer does not end in 1983 or 1984, section 1(f)(3)(B) shall, for purposes of this paragraph, be applied by substituting the calendar year in which such base period ends for 1987.

(6) Qualified organization. – For purposes of this subsection, the term "qualified orgnaization" means any of the following organizations:

(A) Educational institutions. – Any educational organization which –

(i) is an institution of higher education (within the meaning of section 3304(f)), and

(ii) is described in section 170(b)(1)(A)(ii).

(B) Certain scientific research organizations. – Any organization not described in subparagraph (A) which –

(i) is described in section 501(c)(3) and is exempt from tax under section 501(a).

(ii) is organized and operated primarily to conduct scientific research, and

(iii) is not a private foundation.

(C) Scientific tax-exempt organizations. – Any organization which –

(i) is described in –

(I) section 501(c)(3) (other than a private foundation), or

(II) section 501(c)(6),

(ii) is exempt from tax under section 501(a).

(iii) is organized and operated primarily to promote scientific research by qualified organizations described in subparagraph (A) pursuant to written research agreements, and

(iv) currently expends –

(I) substantially all of its funds, or

(II) substantially all of the basic research payments received by it, for grants to, or contracts for basic research with, an organization described in subparagraph (A).

(D) Certain grant organizations. – Any organization not described in subparagraph (B) or (C) which –

(i) is described in section 501(c)(3) and is exempt from tax under section 501(a) (other than a private foundation),

(ii) is established and maintained by an organization established before July 10, 1981, which meets the requirements of clause (i),

(iii) is organized and operated exclusively – for the purposes of making grants to organizations described in subparagraph (A) pursuant to written research agreements for purposes of basic research, and

(iv) makes an election, revocable only with the consent of the Secretary, to be treated as a private foundation for purposes of this title (other than section 4940, relating to excise tax based on investment income).

(7) Definitions and special rules. – For purposes of this subsection –

(A) Basic research. – The term "basic research" means any original investigation for the advancement of scientific knowledge not having a specific commercial objective, except that such term shall not include –

(i) basic research conducted outside of the United States, and

(ii) basic research in the social sciences, arts, or humanities.

(B) Base period. – The term "base period" means the 3-taxable-year period ending with the taxable year immediately preceding the 1st taxable year of the taxpayer beginning after December 31, 1983.

(C) Exclusion from incremental credit calculation. – For purposes of determining the amount of credit allowable under subsection (a)(1) for any taxable year, the amount of the basic research payments taken into account under subsection (a)(2) –

(i) shall not be treated as qualified research expenses under subsection (a)(1)(A), and

(ii) shall not be included in the computation of base period research expenses under subsection (a)(1)(B).

(D) Trade or business qualification. – For purposes of applying subsection (b)(1) of this subsection, any basic research payments shall be treated as an amount paid in carrying on a trade or business of the taxpayer in the taxable year in which it is paid (without regard to the provisions of subsection (b)(3)(B)).

(E) Certain corporations not eligible. – The term "corporation" shall not include –

(i) an S corporation,

(ii) a personal holding company (as defined in section 542), or

(iii) a service organization (as defined in section 414(m)(3)).

(f) Special Rules. – For purposes of this section –

(1) Aggregation of expenditures. –

(A) Controlled group of corporations. – In determining the amount of the credit under this section –

(i) all members of the same controlled group of corporations shall be treated as a single taxpayer, and

(ii) the credit (if any) allowable by this section to each such member shall be its proportionate share of the increase in qualified research expenses giving rise to the credit.

(B) Common control. – Under regulations prescribed by the Secretary, in determining the amount of the credit under this section –

(i) all trades or businesses (whether or not incorporated) which are under common control shall be treated as a single taxpayer, and

(ii) the credit (if any) allowable by this section to each such person shall be its proportionate share of the qualified research expenses giving rise to the credit. The regulations prescribed under this subparagraph shall be based on principles similar to the principles which apply in the case of subparagraph (A).

(2) Allocations. –

(A) Pass-thru in the case of estates and trusts. – Under regulations prescribed by the Secretary, rules similar to the rules of subsection (d) of section 52 shall apply.

(B) Allocation in the case of partnerships. – In the case of partnerships, the credit shall be allocated among partners under regulations prescribed by the Secretary.

(3) Adjustments for certain acquisitions, etc. – Under regulations prescribed by the Secretary –

(A) Acquisitions. – If, after June 30, 1980, a taxpayer acquires the major portion of a trade or business of another person (hereinafter in this paragraph referred to as the "predecessor") or the major portion of a separate unit of a trade or business of a predecessor, then, for purposes of applying this section for any taxable year ending after such acquisition, the amount of qualified research expenses paid or incurred by the taxpayer during periods before such acquisition shall be increased by so much of such expenses paid or incurred by the predecessor with respect to the acquired trade or business as is

attributable to the portion of such trade or business or separate unit acquired by the taxpayer.

(B) Dispositions. – If, after June 30, 1980 –

(i) a taxpayer disposes of the major portion of any trade or business or the major portion of a separate unit of a trade or business in a transaction to which subparagraph (A) applies, and

(ii) the taxpayer furnished the acquiring person such information as is necessary for the application of subparagraph (A), then, for purposes of applying this section for any taxable year ending after such disposition, the amount of qualified research expenses paid or incurred by the taxpayer during periods before such disposition shall be decreased by so much of such expenses as is attributable to the portion of such trade or business or separate unit disposed of by the taxpayer.

(C) Increase in base period. – If during any of the 3 taxable years following the taxable year in which a disposition to which subparagraph (B) applies occurs, the disposing taxpayer (or a person with whom the taxpayer is required to aggregate expenditures under paragraph (1)) reimburses the acquiring person (or a person required to so aggregate expenditures with such person) for research on behalf of the taxpayer, then the amount of qualified research expenses of the taxpayer for the base period for such taxable year shall be increased by the lesser of –

(i) the amount of the decrease under subparagraph (B) which is allocable to such base period, or

(ii) the product of the number of years in the base period, multiplied by the amount of the reimbursement described in this subparagraph.

(4) Short taxable years. – In the case of any short taxable year, qualified research expenses shall be annualized in such circumstances and under such methods as the Secretary may prescribe by regulation.

(5) Controlled group of corporations. – The term "controlled group of corporations" has the same meaning given to such term by section 1563(a), except that –

(A) "more than 50 percent" shall be substituted for "at least 80 percent" each place it appears in section 1563(a)(1), and

(B) the determination shall be made without regard to subsections (a)(4) and (e)(3)(C) of section 1563.

(g) Special Rule for Pass-Thru of Credit. – In the case of an individual who –

(1) owns an interest in an unincorporated trade or business,

(2) is a partner in a partnership,

(3) is a beneficiary of an estate or trust, or

(4) is a shareholder in an S corporation,

the amount determined under subsection (a) for any taxable year shall not exceed an amount (separately computed with respect to such person's interest in such trade or business or entity) equal to the amount of tax attributable to that portion of a person's taxable income which is allocable or apportionable to the person's interest in such

trade or business or entity. If the amount determined under subsection (a) for any taxable year exceeds the limitation of the preceding sentence, such amount may be carried to other taxable years under the rules of section 39; except that the limitation of the preceding sentence shall be taken into account in lieu of the limitation of section 38(c) in applying section 39.

(h) Election To Have Research Credit Not Apply. –

(1) In general. – A taxpayer may elect to have this section not apply for any taxable year.

(2) Time for making election. – An election under paragraph (1) for any taxable year may be made (or revoked) at any time before the expiration of the 3-year period beginning on the last day prescribed by law for filing the return for such taxable year (determined without regard to extensions).

(3) Manner of making election. – An election under paragraph (1) (or revocation thereof) shall be made in such manner as the Secretary may by regulations prescribe.

(i) Termination. –

(1) In general. – This section shall not apply to any amount paid or incurred after December 31, 1989.

(2) Computation of base period expenses. – In the case of any taxable year which begins before January 1, 1990, and ends after December 31, 1989, any amount for any base period with respect to such taxable year shall be the amount which bears the same ratio to such amount for such base period as the number of days in such

taxable year before January 1, 1990, bears to the total number of days in such taxable year.